News Report

NATIONAL ACADEMY OF SCIENCES • NATIONAL ACADEMY OF ENGINEERING
INSTITUTE OF MEDICINE • NATIONAL RESEARCH COUNCIL

1976 News Report Index

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News Report is a register of activities of the National Academy of Sciences, National Academy of Engineering, Institute of Medicine, and National Research Council. *News Report* is published monthly, following a change of publication frequency, effective with the July 1976 issue; 14 issues were published in 1976.

This index is intended insofar as possible to provide a digest of the contents of the 1976 issues of *News Report*. Because the publication is devoted in large measure to discussion of reports issued by committees and panels of these organizations, principal entries generally are listed by title of report discussed (not by title of *News Report* article), alphabetically. Names of persons, organizations, and agencies also are listed alphabetically. Subject headings and cross-references are included for topics of particularly wide interest (e.g., agriculture, energy, environment). The *News Report Index* is compiled by Gay Mackintosh.

Copies of the 1974 and 1975 indexes are available from the *News Report* office, National Academy of Sciences, 2101 Constitution Avenue N.W., Washington, D.C. 20418. Back volumes of *News Report* in microform can be ordered from Xerox University Microfilms, 300 North Zeeb Road, Ann Arbor, Mi. 48106.

Abramson, Samuel, staff officer for National Research Council Committee on Biosphere Effects of Extremely Low Frequency Radiation—Jul, 1

Academy Forum of the National Academy of Sciences: "A Series of Forums in a Bicentennial Context" intended to explore the broad effects of scientific theories and knowledge through four public meetings on the topics of "Scientific Theories and Social Values" (November 1975), "The Citizen and the Expert" (January 1976), "Frontier Expansion or Inward Development" (March 1976), and "Rude Colony to Dominant Power" (May 1976)—Feb, 1

Academy of Sciences of the Union of Soviet Socialist Republics: agreed to hold joint seminars, with National Academy of Sciences of the United States, in experimental psychology, as part of the inter-academy program of scientific cooperation and exchange—Nov, 1

Accessory Elements and Compounds, Committee on, National Research Council Commission on Natural Resources: organized within Board on Mineral Resources to assess knowledge and implications of trace elements or compounds in newly exploited deposits and prospective sources of minerals. With funding through U.S. Bureau of Mines, a panel study for each mineral resource is planned to identify adequacy of information and suggest research needs, to estimate expected production, to anticipate potential health and environmental problems, and to consider possible recovery of economically significant amounts—Jun, 1-3

Acquisition and Use of Scientific and Technical Information in Pest Control Regulatory Decision-Making at the Federal and State Level, Study on, National Research Council Board on Agriculture and Renewable Resources; one of several studies on use of scientific information in regulatory decision undertaken for U.S. Environmental Protection Agency by the Commission on Natural Resources. Study committee is to look at place of science and technology in regulation of pesticides and the effects of policies and regulation on pest control. Major issues include technical and legal problems in the regulatory process; interpretation of provisions of the Federal Environmental Pesticide Control Act of 1972; need for protecting proprietary interests as incentive for innovation; improvement of information in estimating economic benefits and health costs of pesticide use; and Federal use of new data in setting permissible levels for pesticide residues—Feb, 1-2

Acupuncture Anesthesia in the People's Republic of China, Trip Report of American Acupuncture Study Group (American Council of Learned Societies, Social Science Research Council, and National Research Council's Commission on International Relations); excerpt—Oct, 3

Ades, Harlow, chairman of Working Group on Effects of Noise Exposure on the Human Fetus, National Research Council Committee on Hearing, Bioacoustics and Biomechanics —Sep, 3

Advanced Research Projects Agency: *see Predicting Earthquakes: A Scientific and Technical Evaluation—with Implications for Society*

Advisory Committee on Technology Innovation, Ad Hoc Panel of the, National Research Council Board on Science and Technology for International Development: *see Underexploited Tropical Plants with Promising Economic Value*

agriculture: *see* Acquisition and Use of Scientific and Technical Information in Pest Control Regulatory Decision-Making at the Federal and State Level, Study on; *Ozone and Other Photochemical Oxidants; Underexploited Tropical Plants with Promising Economic Value; World Food and Nutrition Study: Enhancement of Food Production for the United States; World Food and Nutrition Study: Interim Report* and *Recommended Actions on Nutrition Research and Development*

Agriculture and Renewable Resources, National Research Council Board on: *see* Acquisition and Use of Scientific and Technical Information in Pest Control Regulatory Decision-Making at the Federal and State Level, Study on; *World Food and Nutrition Study: Enhancement of Food Production for the United States*

Agriculture, U.S. Department of: *see World Food and Nutrition Study: Enhancement of Food Production for the United States; World Food and Nutrition Study: Interim Report* and *Recommended Actions on Nutrition Research and Development*

Allen, Clarence R., chaired Panel on Earthquake Prediction, National Research Council Committee on Seismology, reporting on *Predicting Earthquakes: A Scientific and Technical Evaluation—with Implications for Society*—Nov, 4

American Academy of Arts and Sciences: *see* United Nations Educational, Scientific and Cultural Organization (UNESCO), Joint Committee on

American Acupuncture Study Group: *see Acupuncture Anesthesia in the People's Republic of China*

American Journal of Epidemiology: see "Background of Angina Pectoris: Social and Environmental Factors in Relation to Smoking"

Ammonia, Subcommittee on, National Research Council Committee on Medical and Biologic Effects of Environmental Pollutants: study is underway to look at current knowledge of the effects of ammonia in the atmosphere, its sources and possible hazards—Feb, 2

Angino, Ernest E., co-chairs (with G. K. Davis) Subcommittee on the Geochemical Environment in Relation to Health and Disease, of National Research Council's U.S. National Committee for Geochemistry; also chairs its Panel on the Geochemistry of Water in Relation to Cardiovascular Disease—Jul, 7

Animal Models of Thrombosis and Hemorrhagic Diseases (DHEW Publication Number (NIH) 76-982), proceedings of workshop

Part II of two parts

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co-sponsored by National Heart and Lung Institute and National Research Council's Institute of Laboratory Animal Resources; excerpt from "Animal Models in Human Medicine" by R. W. Prichard—Nov, 3

Aquatic Weed Management: Some Prospects for the Sudan and the Nile Basin, report of a November 1975 workshop jointly organized by the Board on Science and Technology for International Development, of the U.S. National Academy of Sciences' National Research Council Commission on International Relations, and the National Council for Research, of the Agricultural Research Council of the Democratic Republic of the Sudan. Report finds water hyacinth in the Nile an "environmental disaster," choking watercourses and therefore riverine fisheries, and impeding navigation. Workshop recommended four broad strategies for control, of interest in other regions as well: herbicide application, which must be continued at full capacity despite disadvantages; information exchange among all countries vulnerable to water-weed infestation, and trade restrictions to prevent spread of other "devastating" aquatic plants; biological intervention, requiring cautious experiments lest the proposed controls introduce worse problems; and stimulation of economic incentive to harvest water hyacinth for its possible food and energy values so that it can be exploited as a resource (e.g., the U.S. National Aeronautics and Space Administration has discovered that biogas can be generated from the plant)—Dec, 2-3

An Assessment of the National Need for Facilities Dedicated to the Production of Synchrotron Radiation, Panel to Assess the National Need for Facilities Dedicated to the Production of Synchrotron Radiation, Solid State Sciences Committee, National Research Council Assembly of Mathematical and Physical Sciences; study, funded by National Science Foundation and U.S. Energy Research and Development Administration, examines applications of synchrotron radiation to biological and physical research and technological applications in electronics, medicine, and environmental studies. Report finds that development of synchrotron radiation facilities in this country has not kept pace with research opportunities such radiation offers in science and technology: "needs for synchrotron radiation beyond the next five years can be satisfied only if a commitment to the construction of new dedicated facilities is made now"—Nov, 2-3

atmosphere: *see* Ammonia, Subcommittee on, National Research Council Committee on Medical and Biologic Effects of Environmental Pollutants; *Halocarbons: Effects on Stratospheric Ozone; Halocarbons: Environmental Effects of Chlorofluoromethane Release; Ozone and Other Photochemical Oxidants; Particulate Polycyclic Organic Matter; Vapor-Phase Organic Pollutants: Volatile Hydrocarbons and Oxidation Products*

Atmospheric Chemistry, Panel on, National Research Council Committee on Impacts of Stratospheric Change: *see Halocarbons: Effects on Stratospheric Ozone*

Atomic and Molecular Science, National Research Council Committee on: *see Report of the Subcommittee on Energy-Related Atomic and Molecular Science*

Atomic Energy Commission, U.S.: *see Mineral Resources and the Environment*

awards, National Academy of Engineering: two engineers were honored at the Academy's annual meeting: *Founders Award* to M. Benedict; *Vladimir K. Zworykin Award* to C. K. N. Patel—Jul, 10

awards, National Academy of Sciences: 12 persons were honored for contributions and service at the Academy's annual meeting: *J. Lawrence Smith Medal* to J. A. Wood; *Agassiz Medal* to W. H. Munk; *National Academy of Sciences Public Welfare Medal* to E. Q. Daddario; *Daniel Giraud Elliot Medal* to H. E. Evans; *Mary Clark Thompson Medal* to J. M. Schopf; *Jessie Stevenson Kovalenko Medal* to J. H. Comroe, Jr.; *U.S. Steel Foundation Award in Molecular Biology* to D. Nathans; *Gibbs Brothers Medal* to J. C. Niedermair; *Selman A. Waksman Award in Microbiology* to W. P. Rowe; *G. K. Warren Prize* to W. B. Langbein; *National Academy of Sciences Award for Environmental Quality* to D. M. Evans; *National Academy of Sciences Award for Distinguished Service* to C. K. Reed—Jul, 5

Ayensu, Edward S., headed (with Richard E. Schultes) Ad Hoc Panel of the Advisory Committee on Technology Innovation, National Research Council Board on Science and Technology for International Development, reporting on *Underexploited Tropical Plants with Promising Economic Value*—Mid-Jun, 1

Background of Angina Pectoris: Social and Environmental Factors in Relation to Smoking," collaborative study of Karolinska Institute, Sweden, and National Research Council Medical Follow-up Agency, by Zdenek Hrubec, Rune Cederlöf, and Lars Friberg, reported in *American Journal of Epidemiology*, January 1976; detected independent association of angina risk with heavy alcohol consumption in study of twins for factors associated with heart disease—Mid-Jun, 6-7

Bederson, Benjamin, chaired Subcommittee on Energy-Related Atomic and Molecular Science, of the National Research Council Committee on Atomic and Molecular Science, issuing *Report of the Subcommittee on Energy-Related Atomic and Molecular Science*—Dec, 7

Behavioral and Social Sciences, National Research Council Assembly of: a delegation signed a protocol bringing experimental psychology expressly into the program of scientific cooperation and exchange between the U.S. National Academy of Sciences and the U.S.S.R. Academy of Sciences—Nov, 1; new projects announced: Committee on Research on Law Enforcement and Criminal Justice; Committee on the Social Sciences in the National Science Foundation—Jan, 2; Committee on Fundamental Research Relevant to Education; Committee on Substance Abuse and Human Behavior—Aug, 3; Working Group 81—The Effects of Long-Term Exposure to Noise Upon Human Health; Working Group 82—Electrical Stimulation of the Auditory Nervous System; Working Group 83—The Effects of Intermittent Noise on Speech Intelligibility Indoors; Working Group 84—Human Response to Impulse Noise; Working Group 85—Effects of Noise Exposure on the Human Fetus—Sep, 3; Committee on Evaluation of Sound Spectrograms— Oct, 3; *see also* Evaluation of Sound Spectrograms, Committee on; *Social and Behavioral Science Programs in the National Science Foundation;* Substance Abuse and Habitual Behavior, National Research Council Committee on

Biosphere Effects of Extremely Low Frequency Radiation, National Research Council Committee on: organized within Division of Medical Sciences with funding by U.S. Navy, to review knowledge on possible environmental effects of electromagnetic radiation generated by such projects as Navy's Seafarer (a land-based radio transmitter-and-antenna submarine communications system, formerly Project Sanguine). Following March 1976 public meeting, study committee is to assess adequacy of current information on biological and ecological effects of extremely low frequency radiation as a basis for determining effects of Seafarer, and to identify major concerns and needs for further study—Mar, 1-2; request for pertinent scientific information—Jul, 1

Blum, Seymour L., chairman of workshop on "Conservation," part of symposium on *Materials and the Development of Nations: The Role of Technology* planned jointly by National Academy of Sciences and National Academy of Engineering in conjunction with annual meetings—Apr, 3

Bolt, Richard H., chairs National Research Council Committee on Evaluation of Sound Spectrograms—Oct, 1

Branscomb, Lewis M., quoted on foreign trade issues from 1975 National Academy of Engineering seminar—May, 1

Bronk, Detlev W., served National Academy of Sciences as foreign secretary (1947-1950) and as president (1950-1962); died November 17, 1975; NAS President Handler issued memorial statement on behalf of the Academy—Feb, 1; Mid-Mar, 15

Bronowski, Jacob, quoted from *The Common Sense of Science*—Feb, 1

Brooks, Harvey, co-chairs (with E. L. Ginzton) National Research Council Committee on Nuclear and Alternative Energy Systems

organized to study energy-supply alternatives —Jan, 2
Brooks, Oliver, heads Maritime Transportation Research Board panel conducting study, Impact of Maritime Services on Local Populations—Jul, 2
Brown, Harrison, president of International Council of Scientific Unions, chairman of Steering Committee for the National Research Council Study on World Food and Nutrition—Mid-Mar, 6; formerly foreign secretary of National Academy of Sciences —Sep, 1; comment at ICSU's XVI General Assembly cited; B. Straub elected to succeed Brown as ICSU president—Dec, 6
Brown, Jerry, member of National Research Council Polar Research Board's Committee on Permafrost; directed workshop culminating in Report *Opportunities for Permafrost-Related Research Associated with the Trans-Alaska Pipeline System*—Mid-Mar. 13
Bulger, Roger J., resigned as executive officer of Institute of Medicine of the National Academy of Sciences; succeeded by K. D. Yordy—Oct, 1
Bureau of Mines, U.S.: *see* Accessory Elements and Compounds, Committee on, National Research Council Commission on Natural Resources; Geochemical Environment in Relation to Health and Disease, Subcommittee on the, National Research Council's U.S. National Committee for Geochemistry; *Trends in the Usage of Magnesium*
Busk, Robert S., consultant and former director of research at Dow Chemical Co., world's largest producer of magnesium; chairman of Panel on Trends in Usage of Magnesium, Committee on Technical Aspects of Critical and Strategic Materials, of the National Research Council National Materials Advisory Board—Oct, 5

Cederlöf, Rune, author (with Zdenek Hrubec and Lars Friberg) of study "Background of Angina Pectoris: Social and Environmental Factors in Relation to Smoking"—Mid-Jun, 6
Chemistry of Coal Utilization, Committee on, National Research Council Board on Energy Studies: organized to prepare a second up-to-date supplementary volume to National Research Council's 1945 report *Chemistry of Coal Utilization* (first supplement issued in 1963); committee, with funding from U.S. Energy Research and Development Administration, will deal specifically with science and technology of the uses of coal as an important energy source, including such topics as coal reserves and resources, construction materials for each process technology, and environmental effects throughout the coal-fuel cycle—May, 1, 2-3
Chemistry of Coal Utilization, National Research Council Committee on Chemical Utilization of Coal; 1945 report cited—May, 1, 3
Child, Charles G., III, chaired National Research Council Policy Committee for the Study of Institutional Differences in Post-operative Mortality—Mid-Jun, 8-9
climate: *see Early Action on the Global Environmental Monitoring System; Halocarbons: Environmental Effects of Chlorofluoromethane Release*
Coast Guard, U.S.: *see* Impact of Maritime Services on Local Populations
The Comprehensive Employment and Training Act: Impact on People, Places, Programs, Interim Report by William Mirengoff and Lester Rindler for National Research Council Committee on Evaluation of Employment and Training Programs; appraises transition of Federally financed manpower programs to local control under Comprehensive Employment and Training Act of 1973. While decentralization has been largely accomplished, initial U.S. Department of Labor assessment found unsatisfactory performance among many prime sponsors and little increase in flexibility; yet study finds the scope of manpower activities in terms of places, programs, and people considerably broadened—Mid-Jun, 2-3
Conservation of Nonhuman Primates, Committee on, National Research Council's Institute of Laboratory Animal Resources: *see Neotropical Primates: Field Studies and Conservation; Primate Population Surveys in Guyana and Bolivia*

David, Edward E., Jr., quoted on foreign trade issues from 1975 National Academy of Engineering seminar "U.S. Technology and International Trade"—May, 2
Davies, J. Clarence, III, chaired National Research Council Committee on Principles of Decision Making for Regulating Chemicals in the Environment reporting on *Decision Making for Regulating Chemicals in the Environment*—Mid-Mar, 8
Davis, George K., co-chairs (with E. E. Angino) Subcommittee on the Geochemical Environment in Relation to Health and Disease, of the National Research Council's U.S. National Committee for Geochemistry; also chairs its Panel on the Geochemical Environment and Urolithiasis—Jul, 7
deaths, of members and foreign associates of National Academy of Sciences: E. B. Astwood—Sep, 5; D. W. Bronk—Feb, 1, Mid-Mar, 15; G. O. Curme—Nov, 5; D. M. Dennison—Mid-Jun, 5; T. Dobzhansky—Mid-Mar, 15; A. E. Emerson—Dec, 6; P. Geijer—Mid-Jun, 5; L. C. Gorini—Nov, 5; E. Hadorn—Aug, 5; W. Heisenberg, B. P. Kaufmann—Mid-Mar, 15; F. G. Keyes—Mid-Jun, 5; P. F. Lazarsfeld—Dec, 6; N. Levinson, C. R. Longwell—Mid-Mar, 15; F. W. Loomis—Mid-Jun, 5; W. B. McLean —Nov, 5; R. F. Mehl, R. L. Minkowski—Mid-Mar, 15; J. Monod—Aug, 5; F. D. Murnaghan—Mid-Jun, 5; J. Olds—Nov, 5; L. Onsager—Dec, 6; W. G. Penfield—Mid-Jun, 5; L. Ruzicka—Dec, 6; A. H. Schultz —Aug, 5; T. K. Sherwood—Mid-Mar, 15; J. C. Slater—Nov, 5; E. L. Tatum, G. I. Taylor—Mid-Mar, 15; J. Vinograd—Sep, 5; G. H. Whipple—Mid-Mar, 15
deaths, of members of National Academy of Engineering: A. Ferri—Mid-Mar, 15; R. P. Gifford—Dec, 6; H. T. Heald—Mid-Mar, 15; P. C. Keith—Nov, 5; C. F. Kelly—Sep, 5; P. McGauhey—Mid-Mar, 15; W. B. McLean—Nov, 5; T. K. Sherwood—Mid-Mar, 15
Decision Making for Regulating Chemicals in the Environment, Committee on Principles of Decision Making for Regulating Chemicals in the Environment, Environmental Studies Board, National Research Council Commission on Natural Resources; study for U.S. Environmental Protection Agency examines U.S. Government processes of decision regulating release of chemicals into the environment and urges that burden of proof of public safety and benefit be borne by proponents of use of chemicals. Committee considered four points "most important for an equitable and rational decision-making process": "proper use of analysis" as an aid to clarifying though not resolving regulatory problems; improvements in the statutory and organizational basis for regulation; openness and access to the process of decision; and availability of adequate, reliable information—Mid-Mar, 1, 8-9; excerpts from report deal with uses and limitations of benefit-cost analysis—Mid-Mar, 10-11
de Jager, Cornelius, of Netherlands Astronomical Institute, elected to two-year term as vice president of International Council of Scientific Unions (succeeding B. Straub)—Dec, 6
Disposal in the Marine Environment: An Oceanographic Assessment, Ocean Disposal Study Steering Committee of the Ocean Science Committee, National Research Council Ocean Affairs Board; report summarizes scientific and technical factors which should enter into decisions controlling and managing coastal ocean waste-disposal—such as amount of waste materials, their properties, and processes affecting their distribution in the marine environment. Report recommends establishing a management strategy that recognizes the initial inadequacy of information and works to develop the necessary knowledge—Mid-Jun, 4-5
Drilling for Energy Resources, Ad Hoc Committee on Technology of Drilling for Energy Resources, of the Energy Engineering Board, National Research Council Assembly of Engineering; report follows request from National Science Foundation, U.S. Department of the Interior, and U.S. Energy Research and Development Administration to examine present drilling technology and suggest strategy for research and development where improvements would have greatest effect (e.g., in rotary and geothermal drilling techniques, offshore drilling, Arctic drilling, and mining). Report illustrates

direct relationship between advanced drilling technology and achieving the nation's energy goals, and recommends that Energy Research and Development Administration initiate a plan to ensure greater interaction between public and private programs of drilling research, development, and demonstration—Oct, 1, 4-5

Dyer, Ira, chaired Committee on Seafloor Engineering, National Research Council Marine Board, reporting on *Seafloor Engineering: National Needs and Research Requirements*—Sep, 4

Early Action on the Global Environmental Monitoring System, International Environmental Programs Committee, National Research Council Environmental Studies Board; report based on symposium co-sponsored by committee and U.S. Department of State considers proper tasks and operating principles for the United Nations Environmental Programme Global Environmental Monitoring System (GEMS), whose purpose is early warning concerning environmental trends or changes that threaten human health and well-being. Report recommends that GEMS not, initially, make observations or collect data, but aid in defining problems, coordinating ongoing and proposed projects, and improving measurements of global environmental change to foster world environmental cooperation—Aug, 1, 4-5

Early Experience and Visual Information Processing in Perceptual and Reading Disorders, National Research Council; 1970 conference report cited in reference to problems of maternal and child health and child development—Apr, 5

Earthquake Prediction, Panel on, National Research Council Committee on Seismology: *see Predicting Earthquakes: A Scientific and Technical Evaluation—with Implications for Society*

economic affairs: *see* Acquisition and Use of Scientific and Technical Information in Pest Control Regulatory Decision-Making at the Federal and State Level, Study on; *Aquatic Weed Management: Some Prospects for the Sudan and the Nile Basin; The Comprehensive Employment and Training Act: Impact on People, Places, Programs; Decision Making for Regulating Chemicals in the Environment; Drilling for Energy Resources; Ferrocement, A Versatile Construction Material: Its Increasing Use in Asia;* Identification and Definition of the Technological Factors Contributing to the Nation's Foreign Trade Position and Domestic Socioeconomic Development, Workshop on; Impact of Maritime Services on Local Populations; *Incendiarism: An Overview and an Appraisal; Knowledge and Policy in Manpower: A Study of the Manpower Research and Development Program in the Department of Labor; Materials and the Development of Nations: The Role of Technology; Mineral Resources and the Environment; Minority Group Participation in Graduate Education (Report Number 5);* Nuclear and Alternative Energy Systems, National Research Council Committee on; *Ozone and Other Photochemical Oxidants; Port Development in the United States; Report of the Subcommittee on Energy-Related Atomic and Molecular Science; Seafloor Engineering: National Needs and Research Requirements; Technology Transfer from Foreign Direct Investment in the United States; Toward an Improved U.S. Merchant Marine: A Recommended Program of Studies;* Transportation Research Board, National Research Council; *Trends in the Usage of Magnesium; Underexploited Tropical Plants with Promising Economic Value*

Eden, W. G., chairs committee of National Research Council Board on Agriculture and Renewable Resources conducting Study on the Acquisition and Use of Scientific and Technical Information in Pest Control Regulatory Decision-Making at the Federal and State Level—Feb, 1

education: *see Minority Group Participation in Graduate Education (Report Number 5);* Personnel Requirements for an Advanced Shipbuilding Technology, National Research Council Committee on; Retention of Minority Students in Engineering, Study on; *Science and Technology Policy, Research Management and Planning in the Arab Republic of Egypt*

elections, Institute of Medicine of the National Academy of Sciences: 25 individuals were elected to membership for five-year terms: R. B. Blendon, R. J. Bulger, G. E. Burket, Jr., R. A. Burt, J. A. Clausen, K. Davis, J. Elinson, A. R. Feinstein, W. C. Felch, E. A. Hildreth, J. K. Iglehart, J. Katz, S. L. Kountz, B. Magasanik, A. F. Manley, J. D. Myers, J. Orloff, N. Piore, L. N. Robins, R. S. Ross, C. A. Sanders, J. F. Sherman, B. A. Weisbrod, J. E. White, T. F. Williams; 70 members were reelected: W. G. Anlyan, J. A. Barondess, I. L. Bennett, Jr., R. W. Berliner, J. H. Bryant, J. J. Burns, E. L. Burwell, R. A. Chase, M. F. Collen, R. E. Cooke, J. R. Cox, Jr., H. D. Cross, W. H. Danforth, J. F. Dickson, III, V. P. Dole, F. W. Dowda, R. H. Ebert, J. T. English, R. Fein, M. S. Feldstein, A. A. Fischer, L. C. Ford, D. S. Fredrickson, V. R. Fuchs, R. J. Glaser, R. A. Good, M. R. Greenlick, D. A. Hamburg, H. H. Hiatt, J. R. Hogness, P. B. Hutt, A. J. Ingram, D. Kennedy, A. Kibrick, H. E. Klarman, J. H. Knowles, J. Lederberg, P. R. Lee, I. J. Lewis, R. Lindheim, I. M. London, R. W. Lubic, R. W. Mann, W. J. McNerney, D. Mechanic, M. Michael, Jr., A. L. Morris, M. B. Morrison, Jr., F. Mosteller, G. Piel, C. M. Pierce, J. B. Richmond, H. W. Riecken, D. E. Rogers, W. A. Rosenblith, K. J. Ryan, D. C. Sabiston, Jr., E. Saward, W. B. Schwartz, H. K. Silver, W. A. Spencer, J. B. Turner, J. F. Volker, J. V. Warren, T. H. Weller, R. S. Wilbur, B. Williams, A. Yarmolinsky, A. S. Yerby, G. D. Zuidema—Oct, 6-7

elections, National Academy of Engineering: 104 U.S. engineers were elected to membership, and 21 engineers were named first foreign associates, in April 1976. Reelected to Council terms were Ralph Landau, Joseph M. Pettit, and Frederic A. L. Holloway; Samuel C. Phillips succeeds John H. Dessauer on the Council—Jun, 1; new members are: H. N. Abramson, H. M. Agnew, C. R. Allen, A. H.-S. Ang, H. S. Beattie, D. Berg, D. J. Blickwede, J. E. Breen, C. M. Brinckerhoff, F. P. Brooks, Jr., D. B. Broughton, B. Budiansky, J. E. Burke, M. Camras, D. H. Clewell, J. D. Cole, J. W. Coltman, F. S. Cooper, F. J. Corbato, R. M. Davis, A. J. DeMaria, I. Dyer, M. C. Edlund, L. E. Elkins, M. A. Elliott, R. S. Engelbrecht, E. M. Estes, J. Feinstein, S. J. Fenves, M. Field, M. C. Flemings, C. F. Fogarty, G. F. Fox, A. M. Freudenthal, K.-S. Fu, D. W. Fuerstenau, R. A. Fuhrman, S. W. Golomb, J. B. Goodenough, R. C. Gooding, A. G. Hansen, E. L. Harder, M. Harris, H. A. Haus, A. Hauspurg, H. Heinemann, J. M. Hendrie, A. Hertzberg, W. N. Hess, W. C. Hittinger, C. H. Holley, J. W. Johnson, R. L. Johnson, D. J. Jordan, J. H. Keenan, R. W. Keyes, L. A. Kilgore, G. S. Kino, L. Lapidus, M. Levenson, J. T. Ling, R. K. Linsley, J. P. Longwell, B. T. Lundin, J. D. MacKenzie, E. A. J. Marcatili, H. M. Mark, S. Metzger, H. L. Misch, J. K. Mitchell, G. E. Moore, B. Moreell, R. S. Morse, A. G. Mumma, P. Murray, E. F. O'Neill, H. J. Ongerth, J. S. Parker, N. F. Parker, T. H. Pigford, E. P. Popov, J. Rabinow, E. Reissner, J. B. Reswick, A. S. Russell, R. S. Schechter, R. Schuhmann, Jr., D. Slepian, W. P. Slichter, A. C. Stern, A. W. Straiton, M. C. Sze, H. A. Thomas, Jr., C.-L. Tien, M. Van Dyke, H. E. Von Gierke, J. B. Wachtman, Jr., W. M. Webster, J. Weertman, R. F. Weston, R. T. Whitcomb, J. E. Wilkins, Jr., A. Yariv, A. A. Yee—Jul, 7-10; also elected were the Academy's first 21 foreign associates: J. Ackeret, P. R. Aigrain, A. M. Angelini, R. E. M. Brard, H. B. G. Casimir, A. H. Cottrell, C. Crussard, M. Dassault, J. F. Davidson, U. Finsterwalder, A. A. Hall, W. R. Hawthorne, J. M. Hill, Lord Hinton, M. Ibuka, R. M. Kenedi, A. U. Lamm, W. B. Lewis, H. Mandel, F. D. Richardson, A. W. Skempton—Jul, 10

elections, National Academy of Sciences: 75 U.S. scientists were elected to membership and 15 scientists named as foreign associates at annual meeting. New members of the Council, elected to three-year terms, are Philip W. Anderson, Albert L. Lehninger, DeWitt Stetten, Jr., and Frank H. Westheimer (succeeding Horace W. Babcock, Maclyn McCarty, Kenneth S. Pitzer, and Carroll M. Williams). Emanuel R. Piore was reelected treasurer of the Academy—Jun, 1; new members are: R. H. Abeles, R. K. Adair, C. R. Allen, T. W. Anderson, Jr., J. N. Bahcall, C. P. Bean, E. Beutler, H. M.

Blalock, Jr., J. R. Borchert, R. C. Bose, J. I. Brauman, W. L. Butler, A. G. W. Cameron, J. D. Cole, H. C. Conklin, E. D. Courant, C. C. Cutler, G. K. Davis, K. W. Deutsch, R. L. De Valois, Z. Dische, J. E. Dowling, E. V. Evarts, U. Fano, G. Felsenfeld, G. M. Foster, Jr., C. Friend, H. P. Furth, S. M. Garn, W. Gilbert, H. Grundfest, H. D. Hagstrum, M. H. Hansen, W. F. Harrington, P. M. Hauser, W. Hoeffding, D. S. Hogness, J. R. Huizenga, J. Karle, A. Kelman, H. Koprowski, S. Krugman, A. M. Liberman, J. M. Luttinger, B. H. Mahan, A. G. Motulsky, K. G. McKay, P. C. Nowell, G. A. Olah, A. W. Overhauser, G. E. Pake, N. A. Phillips, G. Polya, H. Popper, J. R. Preer, Jr., F. W. Putnam, O. D. Ratnoff, J. Robinson, W. A. Rosenblith, J. Ross, F. H. Ruddle, H. E. Scarf, R. T. Schimke, G. Schmidt, J. T. Schwartz, W. H. Sewell, P. Sorokin, F. W. Stahl, R. C. Starr, H. Suhl, R. G. Swan, D. W. Talmage, H. E. Umbarger, R. N. Zare, E-An Zen—Jul, 3-4; new foreign associates are: L. Biermann, L. Esaki, H. Harris, L. Hörmander, R. Jost, B. Katz, M. J. Lighthill, M. Lindauer, B. Milner, A. S. Monin, G. Reichel-Dolmatoff, S. Rokkan, M. Sela, R. O. Slatyer, S. Uyeda—Jul, 4-5

Elliott, Martin A., technical editor for project underway in National Research Council Committee on Chemistry of Coal Utilization —May, 1

energy: *see* Chemistry of Coal Utilization, Committee on, National Research Council Board on Energy Studies; *Drilling for Energy Resources; Mineral Resources and the Environment; Natural Gas from Unconventional Geologic Sources;* Nuclear and Alternative Energy Systems, National Research Council Committee on; *Opportunities for Permafrost-Related Research Associated with the Trans-Alaska Pipeline System; Optimizing the Use of Materials and Energy in Transportation Construction (Transportation Research Board Special Report 166); Problems and Priorities in Offshore Permafrost Research; Report of the Subcommittee on Energy-Related Atomic and Molecular Science; Seafloor Engineering: National Needs and Research Requirements; Trends in the Usage of Magnesium*

Energy Engineering Board, National Research Council Assembly of Engineering: *see Drilling for Energy Resources*

Energy-Related Atomic and Molecular Science, Subcommittee on, National Research Council Committee on Atomic and Molecular Science: *see Report of the Subcommittee on Energy-Related Atomic and Molecular Science*

Energy Research and Development Administration, U.S.: *see An Assessment of the National Need for Facilities Dedicated to the Production of Synchrotron Radiation;* Chemistry of Coal Utilization, Committee on, National Research Council Board on Energy Studies; *Drilling for Energy Resources;* Geochemical Environment in Relation to Health and Disease, Subcommittee on the, National Research Council's U.S. National Committee for Geochemistry; *Mineral Resources and the Environment;* Nuclear and Alternative Energy Systems, National Research Council Committee on; *Predicting Earthquakes: A Scientific and Technical Evaluation—with Implications for Society*

Energy Studies, National Research Council Board on: *see* Chemistry of Coal Utilization, Committee on

Engineering Education, Subcommittee on, National Research Council Committee on Minorities in Engineering: *see* Retention of Minority Students in Engineering, Study on

Engineering, National Research Council Assembly of: new projects announced: Improvement of Contracting for Construction of Underground Transportation Facilities in Urban Areas; Study of Metropolitan Communications for the Future; Study of the Potential of Advanced Energy Storage Systems; Study of the Role of Nuclear Power in the Context of Alternative Energy Systems—Jan, 2; Study on Retention of Minority Students in Engineering Education —Apr, 2; Applicability Analysis of Design, Construction, and Installation Certification for Offshore Structures; Workshop on Identification and Definition of the Technological Factors Contributing to the Nation's Foreign Trade Position and Domestic Socioeconomic Development—May, 2; Government Support for Minority Engineering Programs—Jun, 2; Workshop on Technological Factors Contributing to the Nation's Foreign Trade Position—Aug, 3; Review of Ocean Thermal Energy Systems; Study of Marine Mineral Technology—Oct, 3; Study on the Relationship of Technology to Improvements in the Productivity and Effectiveness of Health Care Systems—Nov, 3; Office of Telecommunications Study Panel—Dec, 3; *see also* Identification and Definition of the Technological Factors Contributing to the Nation's Foreign Trade Position and Domestic Socioeconomic Development, Workshop on; Nuclear and Alternative Energy Systems, National Research Council Committee on; *A Review of Short Haul Passenger Transportation; Seafloor Engineering: National Needs and Research Requirements; Technology Transfer from Foreign Direct Investment in the United States*

environment: *see* Accessory Elements and Compounds, Committee on, National Research Council Commission on Natural Resources; Acquisition and Use of Scientific and Technical Information in Pest Control Regulatory Decision-Making at the Federal and State Level, Study on; Ammonia, Subcommittee on, National Research Council Committee on Medical and Biologic Effects of Environmental Pollutants; *Aquatic Weed Management: Some Prospects for the Sudan and the Nile Basin;* Biosphere Effects of Extremely Low Frequency Radiation, National Research Council Committee on; Chemistry of Coal Utilization, Committee on, National Research Council Board on Energy Studies; *Decision Making for Regulating Chemicals in the Environment; Disposal in the Marine Environment: An Oceanographic Assessment; Early Action on the Global Environmental Monitoring System;* Geochemical Environment in Relation to Health and Disease, Subcommittee on the, National Research Council's U. S. National Committee for Geochemistry; *Geochemistry and the Environment: Volume I, The Relation of Selected Trace Elements to Health and Disease; Halocarbons: Effects on Stratospheric Ozone; Halocarbons: Environmental Effects of Chlorofluoromethane Release;* Hydrogen Sulfide, Subcommittee on, National Research Council Committee on Medical and Biologic Effects of Environmental Pollutants; Impact of Maritime Services on Local Populations; International Council of Scientific Unions, actions of XVI General Assembly; *Mineral Resources and the Environment;* Nuclear and Alternative Energy Systems, National Research Council Committee on; Offshore Structures Certification, Panel on, National Research Council Marine Board; *Opportunities for Permafrost-Related Research Associated with the Trans-Alaska Pipeline System; Ozone and Other Photochemical Oxidants; Particulate Polycyclic Organic Matter; Predicting Earthquakes: A Scientific and Technical Evaluation—with Implications for Society; Problems and Priorities in Offshore Permafrost Research; Seafloor Engineering: National Needs and Research Requirements; Vapor-Phase Organic Pollutants: Volatile Hydrocarbons and Oxidation Products*

Environmental Protection Agency, U.S.: *see* Acquisition and Use of Scientific and Technical Information in Pest Control Regulatory Decision-Making at the Federal and State Level, Study on; *Decision Making for Regulating Chemicals in the Environment;* Hydrogen Sulfide, Subcommittee on, National Research Council Committee on Medical and Biologic Effects of Environmental Pollutants; Medical and Biologic Effects of Environmental Pollutants, National Research Council Committee on; *Ozone and Other Photochemical Oxidants;* Transportation Research Board, National Research Council; *Vapor-Phase Organic Pollutants: Volatile Hydrocarbons and Oxidation Products*

Environmental Studies Board, National Research Council: *see Early Action on the Global Environmental Monitoring System*

Estimation of Uranium Resources and Reserves, Panel on, National Research Council Committee on Mineral Resources and the Environment: *see Mineral Resources and the Environment, Supplementary Report: Reserves and Resources of Uranium in the United States*

European Space Agency: *see* International Magnetospheric Study

Evaluation of Employment and Training Programs, National Research Council

Committee on: *see The Comprehensive Employment and Training Act: Impact on People, Places, Programs*
Evaluation of Sound Spectrograms, Committee on, National Research Council Assembly of Behavioral and Social Sciences: study undertaken at request of Federal Bureau of Investigation to determine scientific status of voiceprints; committee is to look at merits and limitations of sound spectrograms and their forensic utility, and to evaluate current research on spectrogram techniques—Oct, 1
Evaluation of Testing for Cystic Fibrosis, Committee for a Study for Evaluation of Testing for Cystic Fibrosis, National Research Council Board on Maternal, Child, and Family Health Research; report in press reviews state of knowledge regarding clinical, epidemiologic, historical and pathologic aspects of cystic fibrosis, and evaluates proposed screening tests—Apr, 4

Federal Bureau of Investigation: *see* Evaluation of Sound Spectrograms, Committee on, National Research Council Assembly of Behavioral and Social Sciences
Federal Council for Science and Technology: *see Opportunities for Permafrost-Related Research Associated with the Trans-Alaska Pipeline System*
Federal Energy Administration, U.S.: *see* Transportation Research Board, National Research Council
Ferrocement, A Versatile Construction Material: Its Increasing Use in Asia, Report of the Workshop on Introduction of Technologies in Asia—Ferrocement, A Case Study, sponsored by U.S. National Academy of Sciences and Asian Institute of Technology; National Research Council Board on Science and Technology for International Development; excerpt—Dec, 3
Fire Research, National Research Council Committee on: *see Incendiarism: An Overview and an Appraisal*
Food and Nutrition Board, National Research Council: *see Immune Response of the Malnourished Child: A Position Paper; Maternal Nutrition and the Course of Pregnancy; The Relationship of Nutrition to Brain Development and Behavior; Toxicants Occurring Naturally in Foods; World Food and Nutrition Study: Interim Report* and *Recommended Actions on Nutrition Research and Development*
food resources: *see Underexploited Tropical Plants with Promising Economic Value; World Food and Nutrition Study: Enhancement of Food Production for the United States; World Food and Nutrition Study: Interim Report* and *Recommended Actions on Nutrition Research and Development*
Ford, Gerald, U.S. President, requested aid of National Academy of Sciences in designing a program to mobilize U.S. resources to improve world food and nutrition; in partial response, three complementary reports were transmitted November 1975 under cover of National Research Council Study on World Food and Nutrition—Mid-Mar, 1, 6, 16
Forest, William H., Jr., directed research team at Coordinating Center for the Institutional Differences Study, Stanford Center for Health Care Research—Mid-Jun, 8
Foster, John S., Jr., chaired Ad Hoc Committee on Technology of Drilling for Energy Resources, of the Energy Engineering Board, National Research Council Assembly of Engineering, reporting on *Drilling for Energy Resources*—Oct, 4
Fredrickson, Donald S., left office as president of Institute of Medicine of the National Academy of Sciences July 1975 (succeeded by D. A. Hamburg) to become director of National Institutes of Health—Jan, 1
Friberg, Lars, author (with Rune Cederlöf and Zdenek Hrubec) of study "Background of Angina Pectoris: Social and Environmental Factors in Relation to Smoking"—Mid-Jun, 6
Friedlander, Sheldon K., chaired Subcommittee on Ozone and Other Photochemical Oxidants, of the National Research Council Committee on Medical and Biologic Effects of Environmental Pollutants, reporting on *Ozone and Other Photochemical Oxidants*—Dec, 5

Galloway, William, chairman of Working Group on Human Response to Impulse Noise, National Research Council Committee on Hearing, Bioacoustics and Biomechanics—Sep, 3
General Services Administration, U.S.: *see Trends in the Usage of Magnesium*
Genetic Experimentation, Scientific Committee on: *see* International Council of Scientific Unions, actions of XVI General Assembly
Genetic Screening: Programs, Principles, and Research, Committee for the Study of Inborn Errors of Metabolism, National Research Council Board on Maternal, Child, and Family Health Research; 1975 report considers problems of genetic screening programs—Apr, 4
Geochemical Environment in Relation to Health and Disease, Subcommittee on the, National Research Council's U.S. National Committee for Geochemistry: organized within the Assembly of Mathematical and Physical Sciences, subcommittee considers the processes and possible health effects involved in movement of trace elements in the natural geochemical environment through the food chain to man (work supported by the National Cancer Institute, U.S. Bureau of Mines, U.S. Geological Survey, and U.S. Energy Research and Development Administration). Subcommittee conducted a series of three workshops, report of the first published as *Geochemistry and the Environment: Volume I, The Relation of Selected Trace Elements to Health and Disease.* Currently underway are studies by the Panel on the Geochemical Environment and Urolithiasis, the Panel on Aging and the Geochemical Environment, the Panel on the Geochemistry of Water in Relation to Cardiovascular Disease, and the Panel on the Trace Element Geochemistry of Coal Resource Development Related to Health—Jul, 1, 6-7
Geochemistry and the Environment: Volume I, The Relation of Selected Trace Elements to Health and Disease, Subcommittee on the Geochemical Environment in Relation to Health and Disease, of the National Research Council's U.S. National Committee for Geochemistry; 1974 report considered 11 elements and the health effects of their natural occurrence as models to explore the state of knowledge on effects of the geochemical environment on health and disease—Jul, 6
Geochemistry, U.S. National Committee for, National Research Council: *see Geochemistry and the Environment: Volume I, The Relation of Selected Trace Elements to Health and Disease;* Geochemical Environment in Relation to Health and Disease, Subcommittee on the
Geological Survey, U.S.: *see* Geochemical Environment in Relation to Health and Disease, Subcommittee on the, National Research Council's U.S. National Committee for Geochemistry; Offshore Structures Certification, Panel on, National Research Council Marine Board; *Predicting Earthquakes: A Scientific and Technical Evaluation—with Implications for Society*
Gerwick, Ben Clifford, Jr., chairman of Panel on Offshore Structures Certification, National Research Council Marine Board—May, 1
Ginzton, Edward L., co-chairs (with H. Brooks) National Research Council Committee on Nuclear and Alternative Energy Systems organized to study energy-supply alternatives—Jan, 2
Global Atmospheric Research Program: *see* Nansen Drift Station Project, Committee on the, National Research Council Polar Research Board
Global Environmental Monitoring System: *see Early Action on the Global Environmental Monitoring System*
Glorig, Aram, chairman of Working Group on the Effects of Long-term Exposure to Noise Upon Human Health, National Research Council Committee on Hearing, Bioacoustics and Biomechanics—Sep, 3
Goldsmith, John R., co-chaired (with B. L. Van Duuren) Panel on Vapor-Phase Organic Pollutants, of the National Research Council Committee on Medical and Biologic Effects of Environmental Pollutants—Aug, 2
"Guidelines on Public Access to Information Concerning Studies Undertaken by Committees of the National Research Council": new procedures for public accessibility to information generated in National Academy of Sciences study activities call for public sessions early in the course of studies dealing with major public-policy issues and provide for access to records (except for privileged information) of study committees. Guidelines, adopted September 20, 1975,

extend the public-access policy statement adopted earlier by the Council of the National Academy of Sciences and concurred in by Council of the National Academy of Engineering and Executive Committee of the Council of the Institute of Medicine—Jan, 1

Gutowsky, H. S., chairman of Panel on Science and the Determination of Safety, National Academy of Sciences' Committee on Science and Public Policy—Mid-Jun, 14; chairman of Panel on Atmospheric Chemistry, National Research Council Committee on Impacts of Stratospheric Change, reporting on *Halocarbons: Effects on Stratospheric Ozone*—Nov, 1

Halocarbons: Effects on Stratospheric Ozone, Panel on Atmospheric Chemistry, National Research Council Committee on Impacts of Stratospheric Change; report deals with effects of release of the halocarbon chlorofluoromethane (widely used as a refrigerant and as a spray propellant) into the environment—Nov, 1

Halocarbons: Environmental Effects of Chlorofluoromethane Release, Committee on Impacts of Stratospheric Change, National Research Council Assembly of Mathematical and Physical Sciences; excerpts from the report summary consider effects of chlorofluoromethane release (from refrigerants and spray propellants) on the earth's climate through reduction of stratospheric ozone and on human health through consequent increase in ultraviolet radiation reaching the earth's surface—Nov, 1, 8-10

Hamburg, David A., appointed to five-year term as president of Institute of Medicine of the National Academy of Sciences, succeeding D. S. Fredrickson—Jan, 1

Hammond, George S., foreign secretary of National Academy of Sciences, quoted in excerpt from *Science and Technology Policy, Research Management and Planning in the Arab Republic of Egypt*—Nov, 7

Handler, Philip, president of National Academy of Sciences and chairman of National Research Council; issued statement on behalf of the Academy upon the death of former Academy president Detlev W. Bronk—Feb, 1; article excerpted from his opening essay in *The National Research Council in 1976: Current Issues and Studies*—Mid-Jun, 1, 12-13; quoted from his keynote address "Science and Hope" to the Academy's U.S. Bicentennial Symposium at the XVI General Assembly of the International Council of Scientific Unions—Dec, 6

Hannay, N. Bruce, appointed foreign secretary of National Academy of Engineering, succeeding B. S. Old; he is also to serve as deputy chairman of the National Research Council Commission on International Relations—Apr, 1

Hansen, Arthur G., chairman of National Research Council Committee on Minorities in Engineering—Apr, 2

Harris, Jerome S., chairman of National Research Council Committee on Maternal and Child Health Research, National Research Council Board on Maternal, Child, and Family Health Research—Apr, 4; Nov, 6

Hastings, J. Woodland, chairman of National Research Council Committee on Biosphere Effects of Extremely Low Frequency Radiation—Mar, 1-2; Jul, 1

health: *see* Accessory Elements and Compounds, Committee on, National Research Council Commission on Natural Resources; Acquisition and Use of Scientific and Technical Information in Pest Control Regulatory Decision-Making at the Federal and State Level, Study on; *Acupuncture Anesthesia in the People's Republic of China;* Ammonia, Subcommittee on, National Research Council Committee on Medical and Biologic Effects of Environmental Pollutants; *Animal Models of Thrombosis and Hemorrhagic Disease (DHEW Publication Number (NIH) 76-982);* "Background of Angina Pectoris: Social and Environmental Factors in Relation to Smoking"; *Decision Making for Regulating Chemicals in the Environment; Early Action on the Global Environmental Monitoring System; Early Experience and Visual Information Processing in Perceptual and Reading Disorders; Evaluation of Testing for Cystic Fibrosis; Genetic Screening: Programs, Principles, and Research;* Geochemical Environment in Relation to Health and Disease, Subcommittee on the, National Research Council's U.S. National Committee for Geochemistry; *Geochemistry and the Environment: Volume I, The Relation of Selected Trace Elements to Health and Disease; Halocarbons: Environmental Effects of Chlorofluoromethane Release;* Hearing, Bioacoustics and Biomechanics, National Research Council Committee on; *Herbal Pharmacology in the People's Republic of China;* Hydrogen Sulfide, Subcommittee on, National Research Council Committee on Medical and Biologic Effects of Environmental Pollutants; *Immune Response of the Malnourished Child: A Position Paper;* Implications of Declining Pediatric Hospitalization Rates, Committee on, National Research Council Board on Maternal, Child, and Family Health Research; *Implications of Guaranteeing Medical Care;* International Council of Scientific Unions, actions of XVI General Assembly; *Maternal and Child Health Research;* Maternal and Child Health Research, Committee on; Maternal, Child, and Family Health Research, National Research Council Board on; *Maternal Nutrition and the Course of Pregnancy;* Medical and Biologic Effects of Environmental Pollutants, Committee on, National Research Council Assembly of Life Sciences; Medical Injury Compensation Mechanisms, Study of; Nuclear and Alternative Energy Systems, National Research Council Committee on; *Of Acceptable Risk: Science and the Determination of Safety; Ozone and Other Photochemical Oxidants; Particulate Polycyclic Organic Matter; Phototherapy in the Newborn: An Overview; The Relationship of Nutrition to Brain Development and Behavior; Study of Institutional Differences in Postoperative Mortality;* Substance Abuse and Habitual Behavior, National Research Council Committee on; *Toxicants Occurring Naturally in Foods; Vapor-Phase Organic Pollutants: Volatile Hydrocarbons and Oxidation Products; World Food and Nutrition Study: Enhancement of Food Production for the United States; World Food and Nutrition Study: Interim Report* and *Recommended Actions on Nutrition Research and Development*

Health, Education, and Welfare, U.S. Department of: *see* Maternal and Child Health Research, Committee on, National Research Council Board on Maternal, Child, and Family Health Research; *Maternal and Child Health Research;* Medical Injury Compensation Mechanisms, Study of

Hearing, Bioacoustics and Biomechanics, National Research Council Committee on: organized within the Assembly of Behavioral and Social Sciences, with work funded through a contract with U.S. Office of Naval Research, committee has established working groups to examine several aspects of the influence of noise on health: Working Group on the Effects of Long-term Exposure to Noise Upon Human Health; Working Group on Effects of Noise Exposure on the Human Fetus; Working Group on the Effects of Intermittent Noise on Speech Intelligibility Indoors; Working Group on Human Response to Impulse Noise; and Working Group on Electrical Stimulation of the Auditory Nervous System—Sep, 1, 3

Hedges, Charles A., program manager for study underway in National Research Council Transportation Research Board and chairman of board's Committee on Finance, Taxation, and Pricing—Jun, 1

Heltner, Paul G., remarks cited from introduction and paper (with R. W. Thorington, Jr.) in National Research Council committee report *Neotropical Primates: Field Studies and Conservation*—Sep, 2

Henry, David D., chaired National Board on Graduate Education, Conference Board of Associated Research Councils, final report published as *Minority Group Participation in Graduate Education (Report Number 5)*—Sep, 6

Henry J. Kaiser Family Foundation: *see* Medical Injury Compensation Mechanisms, Study of

Herbal Pharmacology in the People's Republic of China, Trip Report of American Herbal Pharmacology Delegation to Committee on Scholarly Communication with the People's Republic of China, National Research Council Commission on International Relations; excerpt—Mid-Jun, 3

herbicides: *see Aquatic Weed Management: Some Prospects for the Sudan and the Nile Basin*

Hibbard, Walter R., Jr., chairman of workshop

on "Substitution," part of symposium on *Materials and the Development of Nations: The Role of Technology* planned jointly by National Academy of Sciences and National Academy of Engineering in conjunction with annual meetings—Apr, 3

Hill, George R., chairman of National Research Council Committee on Chemistry of Coal Utilization—May, 1

Hogan, William E., III, chairman of Task Force on Retention, Subcommittee on Engineering Education, National Research Council Committee on Minorities in Engineering—Apr, 1

Hogness, John R., chairs a steering committee of the Institute of Medicine of the National Academy of Sciences conducting Study of Medical Injury Compensation Mechanisms—Nov, 10

Hopps, Howard C., chairman of Panel on Aging and the Geochemical Environment, Subcommittee on the Geochemical Environment in Relation to Health and Disease, of the National Research Council's U.S. National Committee for Geochemistry; quoted—Jul, 1, 6, 7

Hrubec, Zdenek, author (with Rune Cederlöf and Lars Friberg) of study "Background of Angina Pectoris: Social and Environmental Factors in Relation to Smoking"—Mid-Jun, 6

Hydrogen Sulfide, Subcommittee on, National Research Council on Medical and Biologic Effects of Environmental Pollutants: study conducted for U.S. Environmental Protection Agency to consider primarily the biological effects of the gas, a common byproduct of industrial processes as well as of natural processes. Study committee plans to emphasize human effects and controls and areas needing further research, also considering problem of odor measurement and control—Mar, 1

Identification and Definition of the Technological Factors Contributing to the Nation's Foreign Trade Position and Domestic Socioeconomic Development, Workshop on, National Research Council Assembly of Engineering, in cooperation with National Academy of Engineering and other units of the National Research Council; project undertaken at request of National Science Foundation is to consider all issues involved in relationships among U.S. technology, U.S. competitive position in world markets, and health of U.S. domestic economy. Study follows two related activities of National Academy of Engineering and Assembly of Engineering: 1976 seminar series on "Technology Transfer Resulting from Foreign Direct Investment in the United States," and 1975 seminar on "U.S. Technology and International Trade"—May, 1-2

Immune Response of the Malnourished Child: A Position Paper, Subcommittee on Interactions of Nutrition and Infections, Committee on International Nutrition Programs, National Research Council Food and Nutrition Board; paper prepared at request of the committee and a panel of the U.S.-Japan Cooperative Medical Science Program is part of a study of the effects of malnutrition in children on immunity to disease (funding provided by U.S. Agency for International Development and the Kroc Foundation). Paper sets objectives for future studies and addresses problems of achieving them; to increase knowledge on interrelations of nutrition, infection, and immunity, paper recommends standard approaches in further research, investigation of animal models of human malnutrition, and appropriate field studies of malnourished human populations—Oct, 2-3

Impact of Maritime Services on Local Populations, Maritime Transportation Research Board, National Research Council Commission on Sociotechnical Systems; study funded by U.S. Maritime Administration, U.S. Military Sealift Command, and U.S. Coast Guard aims to minimize anticipated environmental, economic, and social costs associated with increased maritime activity in new locations, and to improve public participation in the planning process; kinds of conflicts under study parallel those in reports of social effects associated with construction of the Trans-Alaska Pipeline System—Jul, 1, 2

Impacts of Stratospheric Change, National Research Council Committee on: *see Halocarbons: Effects on Stratospheric Ozone; Halocarbons: Environmental Effects of Chlorofluoromethane Release*

Implications of Declining Pediatric Hospitalization Rates, Committee on, National Research Council Board on Maternal, Child, and Family Health Research: study underway to look at current information on pediatric bed-occupancy rates and outpatient visits for use in planning distribution of available child-health care resources—Apr, 4

Implications of Guaranteeing Medical Care, papers of 1975 annual meeting of the Institute of Medicine, National Academy of Sciences; excerpt from a paper by R. G. Petersdorf—Aug, 6

Incendiarism: An Overview and an Appraisal, National Research Council Committee on Fire Research; report of 1975 Conference on Arson and Incendiarism reveals poor state of information on incendiarism and concludes that a major symposium is needed to consider in detail how research can be directed at this problem. Report calls for better investigation procedures of the origin of fires, attention to kind of program necessary to reduce incendiarism (given current insufficient knowledge), and a detailed systems analysis "relating loss, suppression, and investigation costs and other important factors" in the control of incendiarism—Mid-Mar, 1-3

Institute of Laboratory Animal Resources, National Research Council: *see Animal Models of Thrombosis and Hemorrhagic Diseases (DHEW Publication Number (NIH) 76-982); Neotropical Primates: Field Studies and Conservation; Primate Population Surveys in Guyana and Bolivia*

Institute of Medicine, National Academy of Sciences: D. A. Hamburg appointed to five-year term as president, succeeding D. S. Fredrickson—Jan, 1; K. D. Yordy named executive officer, succeeding R. J. Bulger—Oct, 1; 25 new members were elected to five-year terms, and 70 members were reelected—Oct, 6-7 (*list of names: see also* elections, Institute of Medicine of the National Academy of Sciences); a committee is conducting Study of Medical Injury Compensation Mechanisms—Nov, 1, 10; new projects announced: Evaluative Study of Health Care Quality Assurance Programs—Jan, 2; Study of Medical Injury Compensation Mechanisms—Aug, 3; Costs of Financing of Graduate Medical Education; Fee Screen Analysis; Studies of the Financing and Organization of Graduate Medical Education in U.S. Teaching Hospitals—Dec, 3; *see also* "Guidelines on Public Access to Information Concerning Studies Undertaken by Committees of the National Research Council"; *Implications of Guaranteeing Medical Care; The National Research Council in 1976: Current Issues and Studies*

Institutional Differences in Postoperative Mortality, National Research Council Policy Committee for the Study of: *see Study of Institutional Differences in Postoperative Mortality*

Interactions of Nutrition and Infections, Subcommittee on, National Research Council Committee on International Nutrition Programs: *see Immune Response of the Malnourished Child: A Position Paper*

Interior, U.S. Department of the: *see Drilling for Energy Resources; Mineral Resources and the Environment*

international affairs: *see* Academy of Sciences of the Union of Soviet Socialist Republics; *Aquatic Weed Management: Some Prospects for the Sudan and the Nile Basin; Early Action on the Global Environmental Monitoring System;* Handler, Philip, quoted from his keynote address "Science and Hope"; Identification and Definition of the Technological Factors Contributing to the Nation's Foreign Trade Position and Domestic Socioeconomic Development, Workshop on; International Council of Scientific Unions, actions of XVI General Assembly; *Materials and the Development of Nations: The Role of Technology; Technology Transfer from Foreign Direct Investment in the United States; Underexploited Tropical Plants with Promising Economic Value;* United Nations Educational, Scientific and Cultural Organization (UNESCO), Joint Committee on; *World Food and Nutrition Study: Enhancement of Food Production for the United States; World Food and Nutrition Study: Interim Report* and *Recommended Actions on Nutrition Research and Development*

International Council of Scientific Unions: XVI General Assembly hosted by National

Academy of Sciences is to include special symposium "Science: A Resource for Humankind"—Sep, 1; actions of XVI General Assembly, held in October 1976, include: renewed invitation to scientists of the People's Republic of China to participate in ICSU; reiterated concern that rights of scientists to participate in the world scientific community not be impeded for political reasons; endorsement of steps to bring science to bear more effectively on world food-supply problems; and movement to establish a Scientific Committee on Genetic Experimentation, mainly to consider possible risks, on recommendation of an ad hoc ICSU Committee on Recombinant DNA Molecules—Dec, 1, 6; XVI General Assembly elected Bruno Straub to succeed Harrison Brown as ICSU president, and Cornelius de Jager to succeed Straub as vice president—Dec, 6; quote from Philip Handler's keynote address to the National Academy of Sciences' Bicentennial Symposium at the Council's XVI General Assembly—Dec, 6; *see also* International Magnetospheric Study

International Development, U.S. Agency for: *see Immune Response of the Malnourished Child: A Position Paper*

International Environmental Programs Committee, National Research Council Environmental Studies Board: *see Early Action on the Global Environmental Monitoring System*

International Magnetospheric Study: three-year effort planned by Special Committee on Solar-Terrestrial Physics of the International Council of Scientific Unions and affiliated organizations concerned with space and solar-terrestrial physics, involves coordinated ground-based and spacecraft observations by many countries with the principal goal of gaining insight into cause-and-effect relationships among magnetospheric processes. Major spacecraft projects include International Sun-Earth Explorer Program to be conducted by the European Space Agency and the U.S. National Aeronautics and Space Administration. Overall coordination of 1,000 research programs planned is provided by a steering committee set up by the Special Committee on Solar-Terrestrial Physics—Mar, 1-2

International Nutrition Programs, Committee on, National Research Council Food and Nutrition Board: *see Immune Response of the Malnourished Child: A Position Paper*

International Relations, National Research Council Commission on: new projects announced: A Feasibility Study of a Review of US-USSR Scientific Exchanges and Relations; Joint US-USSR Symposium on Nucleic Acids—Jan, 2; Meeting of U.S. Scientists to Review Flora of the Brazilian Amazon Basin—Jun, 2; Ad Hoc Working Group on the International Industrialization Institute; National Research Council participation in an international cooperative program in training and research on nitrogen fixation in the tropics; Joint U.S.-U.S.S.R. Symposium on Biological Membranes; Joint U.S.-U.S.S.R. Symposium on Chemistry and Biochemistry of Proteins—Aug, 3; *Leucaena latisiliqua:* New Multipurpose Tree Crop for the Tropics; Neglected Tropical Legumes —Sep, 3; Review of U.S.-U.S.S.R. Scientific Exchanges and Relations—Nov, 3; *see also Acupuncture Anesthesia in the People's Republic of China; Aquatic Weed Management: Some Prospects for the Sudan and the Nile Basin; Herbal Pharmacology in the People's Republic of China;* Science and Technology for International Development, Board on; *Underexploited Tropical Plants with Promising Economic Value*

Jones, Reginald H., served as first chairman of National Advisory Council on Minorities in Engineering—Apr, 2

Kamin, Henry, chairman of Subcommittee on Ammonia, National Research Council Committee on Medical and Biologic Effects of Environmental Pollutants—Feb, 2

Kane, E. R., succeeded R. H. Jones as chairman of National Advisory Council on Minorities in Engineering—Apr, 2

Karolinska Institute: *see* "Background of Angina Pectoris: Social and Environmental Factors in Relation to Smoking"

Katz, Michael, chaired Subcommittee on Interactions of Nutrition and Infections, Committee on International Nutrition Programs, National Research Council Food and Nutrition Board, reporting on *Immune Response of the Malnourished Child: A Position Paper*—Oct, 2

Kerr, James W., chaired 1975 seminar held by National Research Council Committee on Fire Research and wrote its report, *Incendiarism: An Overview and an Appraisal;* quoted—Mid-Mar, 2

Knowledge and Policy in Manpower: A Study of the Manpower Research and Development Program in the Department of Labor, National Research Council Committee on Department of Labor Management Research and Development; study of Labor Department's Manpower Research and Development Program concludes that, despite substantive gaps and administrative weaknesses, the program has made some "outstanding contributions to policy, programs, and science in the manpower field." Report urges continuing major support for such studies as Parnes' National Longitudinal Study of Labor Force Behavior, empirical and theoretical studies of labor markets, and methods of evaluation research; important topics needing study include the demand side of manpower problems, effects of collective bargaining and labor agreements on manpower utilization, and interrelationships between manpower policy and other social and economic policies—Mid-Mar, 14

Knudson, Alfred G., chairman of National Research Council Board on Maternal, Child, and Family Health Research—Apr, 4

Kretchmer, Norman, director of National Institute of Child Health and Human Development; letter to National Academy of Sciences' president requested advice of National Research Council Board on Maternal, Child, and Family Health Research on programs in U.S. Department of Health, Education, and Welfare—Apr, 4

Kroc Foundation: *see Immune Response of the Malnourished Child: A Position Paper*

Labor, U.S. Department of: *see The Comprehensive Employment and Training Act: Impact on People, Places, Programs; Knowledge and Policy in Manpower: A Study of the Manpower Research and Development Program in the Department of Labor*

law: *see* Evaluation of Sound Spectrograms, Committee on, National Research Council Assembly of Behavioral and Social Sciences; *Marine Scientific Research and the Third Law of the Sea Conference, 2nd Substantive Session*

Life Sciences, National Research Council Assembly of: new projects announced: Public Information in the Prevention of Occupational Cancer; Review of Use of Ionizing Radiation in the Treatment of Benign Conditions—Jan, 2; Medical and Biologic Effects of Environmental Pollutants: Ammonia; Medical and Biologic Effects of Environmental Pollutants: Iron; VII International Congress on Photobiology Travel Grants—Feb, 2; Medical and Biologic Effects of Environmental Pollutants: Hydrogen Sulfide; Review of Effects of Non-Ionizing Extremely Low Frequency Radiation on the Biosphere—Mar, 2; Conference and Report on Emergency Airway Management—Aug, 3; International Symposium on Pathobiology of Environmental Pollutants: Animal Models and Wildlife as Monitors, June 1-3, 1977—Nov, 3; Ad Hoc Advisory Committee to the American National Red Cross; Committee on Research Needs on the Health Effects of Fossil Fuel Combustion Products—Dec, 3; *see also Maternal and Child Health Research;* Medical and Biologic Effects of Environmental Pollutants, National Research Council Committee on; *Ozone and Other Photochemical Oxidants; Study of Institutional Differences in Post-operative Mortality*

Lowrance, William W., author of study, in consultation with National Academy of Sciences' Committee on Science and Public Policy, *Of Acceptable Risk: Science and the Determination of Safety;* excerpts—Mid-Jun, 14-15

Lowry, H. H., quoted from 1945 National Research Council report *Chemistry of Coal Utilization*—May, 3

Malone, Thomas F., chairman of U.S. Bicentennial Symposium "Science: A

Resource for Humankind," conducted by National Academy of Sciences for XVI General Assembly of the International Council of Scientific Unions—Sep, 1

Marine Board, National Research Council: *see* Offshore Structures Certification, Panel on; *Seafloor Engineering: National Needs and Research Requirements*

Marine Scientific Research and the Third Law of the Sea Conference, 2nd Substantive Session, Freedom of Ocean Science Task Group, National Research Council Ocean Policy Committee; excerpt—Mid-Jun, 5

Maritime Administration, U.S.: *see* Impact of Maritime Services on Local Populations

Maritime Transportation Research Board, National Research Council Commission on Sociotechnical Systems: current activities involve mitigation of adverse effects of maritime-related activities on local populations, maritime research needs and plans, offshore floating nuclear power plants, and maritime policy; Committee on Personnel Requirements for an Advanced Shipbuilding Technology is examining future requirements for shipbuilding personnel—Apr, 1; *see also* Impact of Maritime Services on Local Populations; Personnel Requirements for an Advanced Shipbuilding Technology, National Research Council Committee on; *Port Development in the United States; Toward an Improved U.S. Merchant Marine*

Materials and the Development of Nations: The Role of Technology, joint symposium of National Academy of Sciences and National Academy of Engineering planned in conjunction with April annual meetings to look at materials science and technology in relation to international economic development—Apr, 3

Maternal and Child Health Research, Committee on Maternal and Child Health Research, Division of Medical Sciences, National Research Council Assembly of Life Sciences; report surveys research in the field following request of National Institute of Child Health and Human Development for a study and review of research and training programs throughout the U.S. Department of Health, Education, and Welfare that relate to maternal and child health. Report found serious inadequacy in data on which to base judgments of research needs, though statistics reviewed indicate need to reduce child mortality and morbidity from physical illness, and need for remedial activities, complementing biomedical research, to improve the quality of life for children. Report cites significant accomplishments in U.S. maternal and child-health research as well as important correctable deficiencies. Committee called for establishment of a National Registry of Federally Funded Programs on Maternal, Fetal, and Child Research; intensified epidemiological studies, especially longitudinal studies; support for broad research programs in basic developmental biology; and designation of the National Institute of Child Health and Human Development as the "lead agency" of the Department of Health, Education, and Welfare for "all aspects of human development"—Nov, 1, 6-7

Maternal and Child Health Research, Committee on, National Research Council Board on Maternal, Child, and Family Health Research: formed in 1975 in response to request from N. Kretchmer for review of U.S. Department of Health, Education, and Welfare programs relating to maternal and child health; report expected to identify gaps in programs and recommend opportunities for research, especially in developmental biology, embryology, endocrinology, and genetics—Apr, 4 *(see Maternal and Child Health Research)*

Maternal, Child, and Family Health Research, National Research Council Board on: established within Division of Medical Sciences in 1974 to identify health needs of youth, suggest priorities among problems of maternal, child, and family health, and help direct public and private resources toward a national family health effort. Board subsumed activities of three committees established earlier: Committee on Phototherapy in the Newborn, report published as *Phototherapy in the Newborn: An Overview;* Committee for the Study of Inborn Errors of Metabolism, report published as *Genetic Screening: Programs, Principles, and Research;* and Committee for a Study for Evaluation of Testing for Cystic Fibrosis, report in press. Board has established Committee on Maternal and Child Health Research and Committee on Implications of Declining Pediatric Hospitalization Rates—Apr, 4

Maternal Nutrition and the Course of Pregnancy, National Research Council Food and Nutrition Board; 1970 committee report cited in reference to problems of maternal and child health and child development—Apr, 4-5

Mathematical and Physical Sciences, National Research Council Assembly of: new projects announced: A Scientific Plan for the Proposed Nansen Drift Station—Jan, 2; Committee on Geodesy; Future of Nuclear Science—Jun, 2; An Assessment of the National Need for Facilities Dedicated to the Production of Synchrotron Radiation; Panel on Aging and the Geochemical Environment; Panel on the Geochemical Environment and Urolithiasis; Panel on the Geochemistry of Water in Relation to Cardiovascular Disease; Panel on the Trace Element Geochemistry of Coal Resource Development Related to Health—Jul, 2; Status, Needs and Benefits of Data Compilation—Aug, 3; Scientific Review of the Atmospheric Research and Development Programs of the National Oceanic and Atmospheric Administration—Sep, 3; Institutional Arrangement for the Large Space Telescope; Physics of Space Plasmas—Oct, 3; *see also An Assessment of the National Need for Facilities Dedicated to the Production of Synchrotron Radiation; Predicting Earthquakes: A Scientific and Technical Evaluation—with Implications for Society; Report of the Subcommittee on Energy-Related Atomic and Molecular Science*

McClelland, William A., chairman of National Research Council Committee on Personnel Requirements for an Advanced Shipbuilding Technology—Apr, 1

Medical and Biologic Effects of Environmental Pollutants, National Research Council Committee on: established in 1970 and funded by U.S. Environmental Protection Agency, committee, now in Assembly of Life Sciences, evaluates current knowledge of effects of various pollutants on public health and welfare and indicates research needs—Feb, 2; Jul, 7; *see also* Ammonia, Subcommittee on; Hydrogen Sulfide, Subcommittee on; *Ozone and Other Photochemical Oxidants; Particulate Polycyclic Organic Matter; Vapor-Phase Organic Pollutants: Volatile Hydrocarbons and Oxidation Products*

Medical Follow-up Agency, National Research Council: see "Background of Angina Pectoris: Social and Environmental Factors in Relation to Smoking"

Medical Injury Compensation Mechanisms, Study of, Institute of Medicine of the National Academy of Sciences; committee conducting study to consider alternative ways of providing compensation for medical-malpractice claims scheduled public meeting November 22, 1976. Study grew out of recommendation by an Institute of Medicine committee which reviewed report of a Secretary's Commission on Medical Malpractice, U.S. Department of Health, Education, and Welfare; funds are provided through W. R. Hewlett Foundation and Henry J. Kaiser Family Foundation—Nov, 1, 10

Military Sealift Command, U.S.: *see* Impact of Maritime Services on Local Populations

Mineral Resources and the Environment, Committee on Mineral Resources and the Environment, National Research Council Commission on Natural Resources; 1975 report discusses estimates of supply and demand for minerals and energy and need for a "conservation ethic" to ease future imbalances. Committee's work, funded by U.S. Department of the Interior, includes supplementary reports of panels. *Supplementary Report: Reserves and Resources of Uranium in the United States*, Panel on Estimation of Uranium Resources and Reserves, expands themes of earlier report and draws on information from U.S. Atomic Energy Commission and its successor agency, the U.S. Energy Research and Development Administration. Report assesses validity of estimates of U.S. uranium supply and finds data insufficient to predict adequacy beyond about 1980; recommended is a firm Government policy statement as to the desired role of uranium-generated power in U.S. energy economy so that need for conversion of uranium resources to reserves may be determined—Mid-Mar, 4, 15;

Supplementary Report: Resource Recovery from Municipal Solid Wastes, Panel on Resource Recovery from Municipal Solid Wastes, looks at changes needed in social and technological bases for resource recovery and urges a steady policy for all levels of government to facilitate and encourage a smooth shift in priorities from waste disposal to resource recovery, with suitable incentives provided as necessary—Mid-Mar, 5, 16; *Supplementary Report: Coal Workers' Pneumoconiosis—Medical Considerations, Some Social Implications*, Committee on Mineral Resources and the Environment panel report, National Research Council; excerpt—Mid-Jun, 14

Mineral Resources, National Research Council Board on: *see* Accessory Elements and Compounds, Committee on, National Research Council Commission on Natural Resources; *Natural Gas from Unconventional Geologic Sources*

Minorities in Engineering: A Blueprint for Action (Alfred P. Sloan Foundation, 1974), Planning Commission for Expanding Minority Opportunities in Engineering; report cited—Apr, 1

Minorities in Engineering, National Advisory Council on: formed in 1974 at invitation of president of National Academy of Engineering, council advises National Academy of Engineering and National Research Council Assembly of Engineering on minority engineering activities; funds provided by industrial members support work of National Research Council Committee on Minorities in Engineering—Apr, 2

Minorities in Engineering, National Research Council Committee on: established by National Academy of Engineering in 1974, now included within Assembly of Engineering, committee coordinates activities aimed at increasing number of minority engineers; composed of Subcommittees on Finance, Manpower Utilization, Engineering Education, and Pre-Engineering Education, Guidance, and Motivation. Task forces study specific issues prior to committee action, such as the current Study on Retention of Minority Students in Engineering—Apr, 1, 2

Minority Group Participation in Graduate Education (Report Number 5), National Board on Graduate Education, Conference Board of Associated Research Councils (American Council on Education, Social Science Research Council, American Council of Learned Societies, and National Research Council); final report on barriers preventing fuller participation of minority students in graduate education concludes that government and institutions must share responsibility for increasing the number of minority graduates. Report states "employment uncertainties should not serve as a rationale for limiting efforts to increase minority participation," and urges programs "targeted" to the needs of minorities—Sep, 6

Mirengoff, William, staff director of National Research Council Committee on Evaluation of Employment and Training Programs; prepared report (with Lester Rindler), *The Comprehensive Employment and Training Act: Impact on People, Places, Programs*—Mid-Jun, 2

Morse, Robert W., chaired Panel to Assess the National Need for Facilities Dedicated to the Production of Synchrotron Radiation, Solid State Sciences Committee, National Research Council Assembly of Mathematical and Physical Sciences; quoted from preface to report, *An Assessment of the National Need for Facilities Dedicated to the Production of Synchrotron Radiation*—Nov, 2

Moses, Lincoln E., quoted from *The National Halothane Study* on post-surgical death rates—Mid-Jun, 8

Mosteller, Frederick, quoted from *The National Halothane Study* on post-surgical death rates—Mid-Jun, 8

Nansen Drift Station Project, Committee on the, National Research Council Polar Research Board: study is underway to develop a scientific plan for a Nansen Drift Station approximating the Arctic Ocean path of pioneer oceanographer Fridtjog Nansen's ship *Fram*. Polar Research Board invites suggestions from U.S. and foreign scientists on multidisciplinary scientific opportunities presented by the proposed research platform, such as the possibility for merging observational programs of the Global Atmospheric Research Program's Polar Experiment with those of the Nansen Drift Station—Apr, 3

National Academy of Engineering: N. Bruce Hannay succeeded Bruce S. Old as foreign secretary January 1, 1976—Apr, 1; annual meeting April 28-29 to include joint symposium, with National Academy of Sciences, examining topic *Materials and the Development of Nations: The Role of Technology*—Apr, 3; at 12th annual meeting, the Academy elected 104 new members and its first 21 foreign associates, while two engineers were honored with awards—Jul, 7-10 (*lists of names and citations; see also* awards, National Academy of Engineering *and* elections, National Academy of Engineering); *see also* deaths, of members of National Academy of Engineering; "Guidelines on Public Access to Information Concerning Studies Undertaken by Committees of the National Research Council"; Identification and Definition of the Technological Factors Contributing to the Nation's Foreign Trade Position and Domestic Socioeconomic Development, Workshop on; Minorities in Engineering, National Research Council Committee on; *The National Research Council in 1976: Current Issues and Studies; Technology Transfer from Foreign Direct Investment in the United States*

National Academy of Sciences: annual meeting April 26-28 to include Bicentennial Symposium, *Whither Science in the Next Decade?;* joint symposium, with National Academy of Engineering, is to examine the topic *Materials and the Development of Nations: The Role of Technology*—Apr, 3; at 113th annual meeting, the Academy elected 75 new members and 15 foreign associates, while 12 persons were honored with awards—Jul, 3-5 (*lists of names and citations; see also* awards, National Academy of Sciences *and* elections, National Academy of Sciences); with American Academy of Arts and Sciences, established Joint Committee on the United Nations Educational, Scientific and Cultural Organization (UNESCO)—Jul, 3; at 113th annual meeting, Academy members approved the resolution "An Affirmation of Freedom of Inquiry and Expression"—Jul, 5; XVI General Assembly of the International Council of Scientific Unions, hosted by the Academy, to include U.S. Bicentennial Symposium "Science: A Resource for Humankind"—Sep, 1; a protocol was signed by a delegation of the U.S. Academy's National Research Council Assembly of Behavioral and Social Sciences and the U.S.S.R. Academy of Sciences bringing experimental psychology expressly into the inter-academy program; initial topics are "Neurophysiological Mechanisms of Goal Directed Behavior and Learning" and "Normative and Descriptive Models for Decision Processes"—Nov, 1; hosted XVI General Assembly of International Council of Scientific Unions—Dec, 1; quote from Philip Handler's keynote address "Science and Hope" to the Academy's Bicentennial Symposium at the XVI General Assembly of the International Council of Scientific Unions—Dec, 6; *see also* Academy Forum of the National Academy of Sciences; deaths, of members and foreign associates of National Academy of Sciences; "Guidelines on Public Access to Information Concerning Studies Undertaken by Committees of the National Research Council"; *The National Research Council in 1976: Current Issues and Studies*

National Aeronautics and Space Administration, U.S.: *see* International Magnetospheric Study; *Predicting Earthquakes: A Scientific and Technical Evaluation—with Implications for Society; see also Aquatic Weed Management: Some Prospects for the Sudan and the Nile Basin*

National Board on Graduate Education, Conference Board of Associated Research Councils: *see Minority Group Participation in Graduate Education (Report Number 5)*

National Cancer Institute: *see* Geochemical Environment in Relation to Health and Disease, Subcommittee on the, National Research Council's U.S. National Committee for Geochemistry

The National Halothane Study, National Research Council; 1969 report cited—Mid-Jun, 1, 8

National Heart and Lung Institute: *see Animal*

Models of Thrombosis and Hemorrhagic Diseases (DHEW Publication Number (NIH) 76-982)
National Institute of Child Health and Human Development: *see Maternal and Child Health Research*
National Institute of General Medical Sciences: *see Study of Institutional Differences in Postoperative Mortality*
National Institute on Drug Abuse: *see* Substance Abuse and Habitual Behavior, National Research Council Committee on
National Materials Advisory Board, National Research Council: *see Trends in the Usage of Magnesium*
National Oceanic and Atmospheric Administration, U.S.: *see Predicting Earthquakes: A Scientific and Technical Evaluation—with Implications for Society*
National Research Council: new projects announced—*see* Behavioral and Social Sciences, National Research Council Assembly of; Engineering, National Research Council Assembly of; International Relations, National Research Council Commission on; Life Sciences, National Research Council Assembly of; Mathematical and Physical Sciences, National Research Council Assembly of; Natural Resources, National Research Council Commission on; Sociotechnical Systems, National Research Council Commission on; *see also* "Guidelines on Public Access to Information Concerning Studies Undertaken by Committees of the National Research Council"; *The National Research Council in 1976: Current Issues and Studies*
The National Research Council in 1976: Current Issues and Studies, National Academy of Sciences, National Academy of Engineering, and Institute of Medicine; article excerpted from opening essay "Scientific Volunteers in the National Service" by Philip Handler describes scope of the National Research Council program—Mid-Jun, 1, 12-13
National Research Council Study on World Food and Nutrition: *see World Food and Nutrition Study: Enhancement of Food Production for the United States; World Food and Nutrition Study: Interim Report* and *Recommended Actions on Nutrition Research and Development*
National Science Foundation: *see Social and Behavioral Science Programs in the National Science Foundation; see also An Assessment of the National Need for Facilities Dedicated to the Production of Synchrotron Radiation; Drilling for Energy Resources;* Identification and Definition of the Technological Factors Contributing to the Nation's Foreign Trade Position and Domestic Socioeconomic Development, Workshop on; *Of Acceptable Risk: Science and the Determination of Safety; Predicting Earthquakes: A Scientific and Technical Evaluation—with Implications for Society; Report of the Subcommittee on Energy-Related Atomic and Molecular Science; Science and Technology Policy, Research Management and Planning in the Arab Republic of Egypt; Seafloor Engineering: National Needs and Research Requirements*
Natural Gas from Unconventional Geologic Sources, Board on Mineral Resources, National Research Council; excerpt—Sep, 5
Natural Resources, National Research Council Commission on: new projects announced: The Acquisition and Use of Scientific and Technical Information in Pest Control Regulatory Decision-Making at the Federal and State Levels; A Multimedia Approach to Municipal Sludge Management; Panel on Low Molecular Weight Halogenated Hydrocarbons; Panel on Nitrates; Study of Jojoba Production System Potential—Feb, 2; Chemistry of Coal Utilization—May, 2; Committee on Accessory Elements and Compounds—Jun, 2; Brucellosis Research—Oct, 3; Committee on Mineral Technology; An Overview of the U.S. Mineral Supply Position; Evaluation of the Outer Continental Shelf Environmental Studies Program—Nov, 3; *see also* Accessory Elements and Compounds, Committee on; Acquisition and Use of Scientific and Technical Information in Pest Control Regulatory Decision-Making at the Federal and State Level, Study on; *Mineral Resources and the Environment*
Naval Research, U.S. Office of: *see* Hearing, Bioacoustics and Biomechanics, National Research Council Committee on
Navy, U.S.: *see* Biosphere Effects of Extremely Low Frequency Radiation, National Research Council Committee on
Neff, William D., chairman of Working Group on Electrical Stimulation of the Auditory Nervous System, National Research Council Committee on Hearing, Bioacoustics and Biomechanics—Sep, 3
Neotropical Primates: Field Studies and Conservation, Committee on Conservation of Nonhuman Primates, National Research Council's Institute of Laboratory Animal Resources; proceedings of 1972 symposium on Distribution and Abundance of Neotropical Primates concern crises presented by destruction of natural habitats in the economic development of many Central and South American countries, threatening monkey populations. Conservation and management measures depend upon better population-ecology information—Sep, 2 *(see also Primate Population Surveys in Guyana and Bolivia)*
Nuclear and Alternative Energy Systems, National Research Council Committee on: with administrative support from Assembly of Engineering, study undertaken at request of U.S. Energy Research and Development Administration is intended to compare alternative ways of meeting U.S. energy needs during the interim period between depletion of domestic petroleum and development of long-term energy supply from solar, geothermal, and fusion power. Study is to consider potential risks and benefits of each alternative and how nuclear power may fit in an overall scheme, addressing such issues as resource supplies and economic availability; conservation and demand-reduction; coal supply and technologies; need for nuclear power; environmental costs of the alternatives; health risks; and such social problems as safety, siting, manpower, and public acceptability—Jan, 1-2
Nuclear Regulatory Agency, U.S.: *see Predicting Earthquakes: A Scientific and Technical Evaluation—with Implications for Society*

Ocean Policy Committee, National Research Council: *see Marine Scientific Research and the Third Law of the Sea Conference, 2nd Substantive Session*
Ocean Science Committee, National Research Council Ocean Affairs Board: *see Disposal in the Marine Environment: An Oceanographic Assessment*
oceans: *see Disposal in the Marine Environment: An Oceanographic Assessment; Marine Scientific Research and the Third Law of the Sea Conference, 2nd Substantive Session;* Nansen Drift Station Project, Committee on the, National Research Council Polar Research Board; *Problems and Priorities in Offshore Permafrost Research; Seafloor Engineering: National Needs and Research Requirements*
Of Acceptable Risk: Science and the Determination of Safety, by William W. Lowrance, in consultation with Panel on Science and the Determination of Safety, National Academy of Sciences' Committee on Science and Public Policy; study, supported by National Science Foundation, considers safety as a personal or social value judgment of the acceptability of risk; excerpts discuss the nature of safety decisions—Mid-Jun, 14-15
Offshore Structures Certification, Panel on, National Research Council Marine Board: to provide technical analysis and suggested approval procedures for the design, construction, and installation of offshore structures, following U.S. Geological Survey request for assistance in connection with its regulatory responsibilities for oil and gas operations—May, 1
Old, Bruce S., former foreign secretary of National Academy of Engineering, succeeded by N. Bruce Hannay—Apr, 1
Opportunities for Permafrost-Related Research Associated with the Trans-Alaska Pipeline System, Committee on Permafrost, National Research Council Polar Research Board; report based on 1975 workshop (as part of a study requested by Interagency Arctic Research Coordinating Committee of Federal Council for Science and Technology) recommends a variety of studies in conjunction with the pipeline's construction and operation to learn more about permafrost, its effects on man-made structures and their operation, and environmental impact on construction in a cold environment—

Mid-Mar, 12-13
Optimizing the Use of Materials and Energy in Transportation Construction (Transportation Research Board Special Report 166), National Research Council Transportation Research Board; excerpt—Oct, 5
Osborn, Elburt F., chairman of workshop on "Resource Identification and Development," part of symposium on *Materials and the Development of Nations: The Role of Technology* planned jointly by National Academy of Sciences and National Acader of Engineering in conjunction with annual meetings—Apr, 3
Ozone and Other Photochemical Oxidants, Subcommittee on Ozone and Other Photochemical Oxidants, Committee on Medical and Biologic Effects of Environmental Pollutants, National Research Council Assembly of Life Sciences; report is one of a series, requested by U.S. Environmental Protection Agency, examining the state of knowledge of effects of pollutants. Subcommittee's review of scientific literature on effects of oxidants from photochemical smog found evidence of undesirable health effects at half the ozone concentrations sometimes encountered in urban atmospheres. Report urges proceeding with regulation of emissions while continuing research to identify individual harmful agents in photochemical smog and their effects. Better understanding of the chemical origins of photochemical oxidants is needed, as well as more adequate dose-response information for humans exposed to ozone and more data for estimating economic losses in agriculture and damage to materials from pollutants—Dec, 1, 4-5

Pan American Health Organization: *see Primate Population Surveys in Guyana and Bolivia*
Particulate Polycyclic Organic Matter, National Research Council Committee on Medical and Biologic Effects of Environmental Pollutants; 1972 report considers selected particulate organic pollutants and possible effects on lung-cancer rates—Aug, 2
People's Republic of China: *see Acupuncture Anesthesia in the People's Republic of China; Herbal Pharmacology in the People's Republic of China; Predicting Earthquakes: A Scientific and Technical Evaluation—with Implications for Society; see also* International Council of Scientific Unions, actions of XVI General Assembly
Permafrost, Committee on, National Research Council Polar Research Board: *see Opportunities for Permafrost-Related Research Associated with the Trans-Alaska Pipeline System; Problems and Priorities in Offshore Permafrost Research*
Personnel Requirements for an Advanced Shipbuilding Technology, National Research Council Committee on: operating under the Maritime Transportation Research Board, with funding from U.S. Maritime Administration, U.S. Military Sealift Command, and U.S. Coast Guard, committee is to examine future requirements—especially education and skills for shipyard management and labor personnel—for U.S. shipbuilding personnel to keep abreast of technological change in the maritime industry—Apr, 1
pesticides: *see* Acquisition and Use of Scientific and Technical Information in Pest Control Regulatory Decision-Making at the Federal and State Level, Study on
Péwé, Troy L., chairman of Committee on Permafrost, National Research Council Polar Research Board, reporting on *Opportunities for Permafrost-Related Research Associated with the Trans-Alaska Pipeline System*—Mid-Mar, 13
Phototherapy in the Newborn: An Overview, Committee on Phototherapy in the Newborn, National Research Council Board on Maternal, Child, and Family Health Research; 1974 report of a symposium explores use of light in treatment of human disease, especially infant hyperbilirubinemia—Apr, 4
Piore, Emanuel R., reelected to third four-year term as treasurer of National Academy of Sciences—Jun, 1
Polar Research Board, National Research Council: *see* Nansen Drift Station Project, Committee on the; *Opportunities for Permafrost-Related Research Associated with the Trans-Alaska Pipeline System; Problems and Priorities in Offshore Permafrost Research*
population: *see World Food and Nutrition Study: Enhancement of Food Production for the United States; World Food and Nutrition Study: Interim Report* and *Recommended Actions on Nutrition Research and Development*
Port Development in the United States, Maritime Transportation Research Board, National Research Council Commission on Sociotechnical Systems; report notes rapid transportation technology changes affecting port development, and social and economic implications—Jul, 1-2
Predicting Earthquakes: A Scientific and Technical Evaluation—with Implications for Society, Panel on Earthquake Prediction, Committee on Seismology, National Research Council Assembly of Mathematical and Physical Sciences; study is a technical evaluation of earthquake prediction, examining its scientific merit and promise (work supported by Advanced Research Projects Agency, National Science Foundation, U.S. Geological Survey, National Oceanic and Atmospheric Administration, National Aeronautics and Space Administration, U.S. Nuclear Regulatory Agency, and U.S. Energy Research and Development Administration). Report concludes that reliable earthquake prediction is an achievable goal, though probably 10 or more years away, and urges immediate attention to development of a system concurrently with a system concerned with social responses to earthquake predictions. Quotes from appendix by L. R. Sykes review the Chinese program of earthquake-prediction research—Nov, 4-5
Prichard, R. W., quoted, in excerpt from *Animal Models of Thrombosis and Hemorrhagic Diseases (DHEW Publication Number (NIH) 76-982)*—Nov, 3
Primate Population Surveys in Guyana and Bolivia, Committee on Conservation of Nonhuman Primates, National Research Council's Institute of Laboratory Animal Resources; report of field surveys conducted under subcontract with the Pan American Health Organization provides quantitative data on distribution and abundance of primate populations threatened by economic development destroying natural habitats. Committee recommended continued studies and programs for conservation, management, and production of primates—Sep, 2 *(see also Neotropical Primates: Field Studies and Conservation)*
Principles of Decision Making for Regulating Chemicals in the Environment, National Research Council Committee on: *see Decision Making for Regulating Chemicals in the Environment*
Problems and Priorities in Offshore Permafrost Research, Ad Hoc Study Group on Offshore Permafrost, Committee on Permafrost, National Research Council Polar Research Board; excerpt—Aug, 5
Project Sanguine (now Project Seafarer): *see* Biosphere Effects of Extremely Low Frequency Radiation, National Research Council Committee on
Public Access to Information Concerning Studies Undertaken by Committees of the National Research Council: policy described—Mid-Jun, 13; *see also* "Guidelines on Public Access to Information Concerning Studies Undertaken by Committees of the National Research Council"

Recombinant DNA Molecules, ad hoc Committee on: *see* International Council of Scientific Unions
The Relationship of Nutrition to Brain Development and Behavior, National Research Council Food and Nutrition Board; 1973 subcommittee report cited in reference to problems of maternal and child health and child development—Apr, 4
Report of the Subcommittee on Energy-Related Atomic and Molecular Science, Subcommittee on Energy-Related Atomic and Molecular Science, Committee on Atomic and Molecular Science, National Research Council Assembly of Mathematical and Physical Sciences; report offers a synoptic survey of atomic- and molecular-science problems that underlie problems of commercial-scale power production and energy use. Study, supported by the National Science Foundation, found that relatively

small gains in combustion efficiency can have enormous economic effects in conservation of fossil fuels; commercial-scale power-supply and energy-use "areas on which atomic and molecular science bears most significantly are conventional combustion, nuclear fission, and controlled fusion"—Dec, 1, 7

Resource Recovery from Municipal Solid Wastes, Panel on, National Research Council Committee on Mineral Resources and the Environment: *see Mineral Resources and the Environment, Supplementary Report: Resource Recovery from Municipal Solid Wastes*

resources: *see* Accessory Elements and Compounds, Committee on, National Research Council Commission on Natural Resources; Chemistry of Coal Utilization, Committee on, National Research Council Board on Energy Studies; *Drilling for Energy Resources; Mineral Resources and the Environment; Natural Gas from Unconventional Geologic Sources;* Nuclear and Alternative Energy Systems, National Research Council Committee on; Offshore Structures Certification, Panel on, National Research Council Marine Board; *Report of the Subcommittee on Energy-Related Atomic and Molecular Science; Seafloor Engineering: National Needs and Research Requirements; Trends in the Usage of Magnesium*

Retention of Minority Students in Engineering, Study on, Subcommittee on Engineering Education's Task Force on Retention, National Research Council Committee on Minorities in Engineering; study is to find ways to increase number of minority engineering graduates by examining factors affecting drop-out rate, social and cultural influences on minority educational opportunities, and problems facing minority students in various academic settings—Apr, 1-2

A Review of Short Haul Passenger Transportation, Committee on Transportation, National Research Council Assembly of Engineering; excerpt—Mid-Jun, 15

Rindler, Lester, senior research associate for National Research Council Committee on Evaluation of Employment and Training Programs; prepared report (with William Mirengoff), *The Comprehensive Employment and Training Act: Impact on People, Places, Programs*—Mid-Jun, 2

Roederer, Juan G., chairs steering committee set up by Special Committee on Solar-Terrestrial Physics of the International Council of Scientific Unions to coordinate efforts during the International Magnetospheric Study—Mar, 1, 2

Roy, Rustum, chairman of workshop on "Processing," part of symposium on *Materials and the Development of Nations: The Role of Technology* planned jointly by National Academy of Sciences and National Academy of Engineering in conjunction with annual meetings—Apr, 3

Rutledge, Philip J., chairman of National Research Council Committee on Evaluation of Employment and Training Programs reporting on *The Comprehensive Employment and Training Act: Impact on People, Places, Programs*—Mid-Jun, 2

Schultes, Richard E., headed (with Edward S. Ayensu) Ad Hoc Panel of the National Research Council Advisory Committee on Technology Innovation, reporting on *Underexploited Tropical Plants with Promising Economic Value*—Mid-Jun, 1

Science and Public Policy, National Academy of Sciences' Committee on: *see Of Acceptable Risk: Science and the Determination of Safety*

Science and Technology for International Development, Board on, National Research Council Commission on International Relations: *see Aquatic Weed Management: Some Prospects for the Sudan and the Nile Basin; Ferrocement, A Versatile Construction Material: Its Increasing Use in Asia; Underexploited Tropical Plants with Promising Economic Value*

Science and Technology Policy, Research Management and Planning in the Arab Republic of Egypt, report of symposium and workshop jointly sponsored by Academy of Scientific Research and Technology, Arab Republic of Egypt, U.S. National Science Foundation, and National Research Council of the U.S. National Academy of Sciences; excerpt from "Science Policy and the Educational System in the United States of America" by G. S. Hammond—Nov, 7

Seaborg, Glenn T., chairman of first session of National Academy of Sciences' Bicentennial Symposium *Whither Science in the Next Decade?* scheduled for annual meeting in April—Apr, 3

Seafarer: *see* Biosphere Effects of Extremely Low Frequency Radiation, National Research Council Committee on

Seafloor Engineering: National Needs and Research Requirements, Committee on Seafloor Engineering, Marine Board, National Research Council Assembly of Engineering; study funded by National Science Foundation identifies five areas of national need—energy, minerals, waste management, transportation and communication, and national security—requiring U.S. to surpass present capabilities of seafloor engineering. Report recommends a two-part ("core" and "auxiliary") research plan to provide the necessary advances and to understand environmental and ecological changes resulting from seafloor engineering—Sep, 1, 4-5

Seamans, Robert C., Jr., former president of National Academy of Engineering; National Advisory Council on Minorities in Engineering formed in 1974 at his invitation—Apr, 2

Seismology, Committee on, National Research Council Assembly of Mathematical and Physical Sciences: *see Predicting Earthquakes: A Scientific and Technical Evaluation—with Implications for Society*

Silverman, Arnold J., chairman of Committee on Accessory Elements and Compounds, National Research Council Commission on Natural Resources—Jun, 3

Simon, Herbert A., chaired National Research Council Committee on Social Sciences in the National Science Foundation reporting on *Social and Behavioral Science Programs in the National Science Foundation*—Mid-Jun, 16

Singer, Jerome E., National Research Council staff scientist, accompanied U.S. delegation from the National Research Council Assembly of Behavioral and Social Sciences to the U.S.S.R., where a protocol was signed bringing experimental psychology into the inter-academy program—Nov, 1

Skinner, Brian J., chaired National Research Council Committee on Mineral Resources and the Environment—Mid-Mar, 4, 5

Smith, Roger P., chairs Subcommittee on Hydrogen Sulfide, National Research Council Committee on Medical and Biologic Effects of Environmental Pollutants—Mar, 1

Social and Behavioral Science Programs in the National Science Foundation, Committee on the Social Sciences in the National Science Foundation, National Research Council Assembly of Behavioral and Social Sciences; study undertaken at National Science Foundation request concludes that basic research programs it supports are "generally excellent" but that applied research, particularly the program of Research Applied to National Needs, exhibits administrative and organizational problems. While recommending ways to improve, committee expressed reservations about emphasizing distinction between "basic" and "applied"—Mid-Jun, 16

social problems: *see The Comprehensive Employment and Training Act: Impact on People, Places, Programs;* Evaluation of Sound Spectrograms, Committee on, National Research Council Assembly of Behavioral and Social Sciences; *Immune Response of the Malnourished Child: A Position Paper;* Impact of Maritime Services on Local Populations; *Incendiarism: An Overview and an Appraisal; Knowledge and Policy in Manpower: A Study of the Manpower Research and Development Program in the Department of Labor; Maternal and Child Health Research;* Medical Injury Compensation Mechanisms, Study of; *Mineral Resources and the Environment; Minority Group Participation in Graduate Education (Report Number 5);* Nuclear and Alternative Energy Systems, National Research Council Committee on; *Of Acceptable Risk: Science and the Determination of Safety; Port Development in the United States; Predicting Earthquakes: A Scientific and Technical Evaluation—with Implications for Society; Report of the Subcommittee on Energy-Related Atomic and Molecular Science;* Retention of Minority Students in Engineering, Study on; *Social and Behavioral Science Programs in the National Science Founda-*

tion; Substance Abuse and Habitual Behavior, National Research Council Committee on; *World Food and Nutrition Study: Enhancement of Food Production for the United States; World Food and Nutrition Study: Interim Report* and *Recommended Actions on Nutrition Research and Development; see also* economic affairs; education; energy; environment; food resources; health; law; population

Social Sciences in the National Science Foundation, National Research Council Committee on: *see Social and Behavioral Science Programs in the National Science Foundation*

Sociotechnical Systems, National Research Council Commission on: new projects announced: Contingency Plans for Chromium Utilization: Evaluation of Industrial Hazards; Skirts and Seals for Surface Effect Vehicles —Mar, 2; Non-Destructive Testing of Aerospace Systems; Personnel Requirements for an Advanced Shipbuilding Technology—Apr, 2; Fretting-Initiated Fatigue—May, 2; Dynamic Response of Materials Subjected to High Strain Loading; Conference on Recent Research in Airport Pavement; Optimizing the Use of Materials and Energy in Transportation Construction; Study of Financing Efficient Urban Transportation; Study of Strategies for Reducing Gasoline Consumption through Improved Motor Vehicle Efficiency—Jun, 2; Development of Plans to Study the Socioeconomic Effects of Earthquake Predictions; The Impact of Maritime Services on Local Populations—Jul, 2; Dynamic Response of Materials Subjected to High Strain Rate Loading; Potentially Critical Materials; Program of Studies on International Disaster Assistance —Sep, 3; Conservation of Materials in Energy Systems through the Reduction of Erosion—Nov, 3; Project Level Considerations to Assure Adequate Air Quality—Dec, 3; *see also* Impact of Maritime Services on Local Populations

Solar-Terrestrial Physics, Special Committee on, International Council of Scientific Unions: *see* International Magnetospheric Study

Solid State Sciences Committee, National Research Council: *see An Assessment of the National Need for Facilities Dedicated to the Production of Synchrotron Radiation*

space: *see* International Magnetospheric Study

Stanford Center for Health Care Research: *see Study of Institutional Differences in Postoperative Mortality*

State, U.S. Department of: *see Early Action on the Global Environmental Monitoring System*

Stellar, Eliot, chairman of second session of National Academy of Sciences' Bicentennial Symposium *Whither Science in the Next Decade?* scheduled for annual meeting in April—Apr, 3

Straub, Bruno, of Hungarian Academy of Sciences, elected to two-year term as president of International Council of Scientific Unions (succeeding Harrison Brown)—Dec, 6

A Study for Evaluation of Testing for Cystic Fibrosis, National Research Council Committee for: *see Evaluation of Testing for Cystic Fibrosis*

Study of Institutional Differences in Postoperative Mortality, Coordinating Center for the Institutional Differences Study, Stanford Center for Health Care Research; for the Policy Committee for the Study of Institutional Differences in Postoperative Mortality, National Research Council Assembly of Life Sciences; study supported by National Institute of General Medical Sciences is an effort toward understanding differences in post-surgical death rates as noted in 1969 *National Halothane Study*. On the basis of the methodology developed and analyses conducted, study confirms that large variations in quality of surgical care do exist and recommends integration of monitoring and analytical procedures into hospital quality-assessment programs—Mid-Jun, 1, 8-9

Substance Abuse and Habitual Behavior, National Research Council Committee on: organized within the Assembly of Behavioral and Social Sciences following an Ad Hoc Group Meeting on Addiction and Habitual Behavior, committee is to look at addictive behaviors for common denominators among their physiological, psychological, social, and economic aspects with the goal of identifying directions for research and implications for public policy. At request of sponsoring agency, the National Institute on Drug Abuse, committee is to plan a series of conferences on addictive behavior and substance abuse, and summarize the current state of research in the area—Aug, 1, 6

Sudan, Democratic Republic of the: *see Aquatic Weed Management: Some Prospects for the Sudan and the Nile Basin*

Swanson, Gordon I., chaired National Research Council Committee on Department of Labor Manpower Research and Development reporting on *Knowledge and Policy in Manpower: A Study of the Manpower Research and Development Program in the Department of Labor*—Mid-Mar, 14

Sykes, Lynn R., member of a 1974 U.S. seismology delegation to the People's Republic of China; quoted from his review of earthquake-prediction research outside the United States, appended to National Research Council panel report *Predicting Earthquakes: A Scientific and Technical Evaluation—with Implications for Society*—Nov, 5

Technical Aspects of Critical and Strategic Materials, Committee on, National Research Council National Materials Advisory Board: *see Trends in the Usage of Magnesium*

Technology of Drilling for Energy Resources, Ad Hoc Committee on, National Research Council Energy Engineering Board: *see Drilling for Energy Resources*

Technology Transfer from Foreign Direct Investment in the United States, National Academy of Engineering Office of the Foreign Secretary, and National Research Council Assembly of Engineering; report of a seminar series considers question of whether direct foreign investment in U.S. research, engineering, and development companies produces a net "outflow" of U.S. technology. Report concludes that "outflow . . . does not diminish the U.S. stock," and that foreign investment seems to have augmented U.S. technology, and thus warns against a U.S. protectionist stance that might curb flow of technology—Aug, 1, 6

Thompson, Melvin W., executive director of National Research Council Committee on Minorities in Engineering—Apr, 2

Thorington, Richard W., Jr., chairman of Committee on Conservation of Nonhuman Primates, of the National Research Council's Institute of Laboratory Animal Resources; remarks cited from introduction and paper (with P. G. Heltne) in symposium report *Neotropical Primates: Field Studies and Conservation*—Sep, 2

Toward an Improved U.S. Merchant Marine: A Recommended Program of Studies, Panel on the Growth of the U.S. Merchant Marine, National Research Council Maritime Transportation Research Board; excerpt—Mid-Jun, 3

Toxicants Occurring Naturally in Foods, National Research Council Food and Nutrition Board; 1973 report cited—Jul, 7

Trans-Alaska Pipeline System: *see Opportunities for Permafrost-Related Research Associated with the Trans-Alaska Pipeline System; see also* Impact of Maritime Services on Local Populations

transportation: *see* Impact of Maritime Services on Local Populations; *Optimizing the Use of Materials and Energy in Transportation Construction (Transportation Research Board Special Report 166);* Personnel Requirements for an Advanced Shipbuilding Technology, National Research Council Committee on; *Port Development in the United States; A Review of Short Haul Passenger Transportation; Toward an Improved U.S. Merchant Marine: A Recommended Program of Studies;* Transportation Research Board, National Research Council

Transportation, Committee on, National Research Council Assembly of Engineering: *see A Review of Short Haul Passenger Transportation*

Transportation Research Board, National Research Council: study sponsored by U.S. Department of Transportation, Environmental Protection Agency, and Federal Energy Administration consists of five workshops and report on present financial problems of urban transportation and alternative remedies. Workshop titles are:

"Transportation Pricing Alternatives," "Regulatory Constraints to Efficient Public Transportation," "Public Transportation Management and Marketing," "Labor Practices and Productivity in Public Transportation," and "Public Transportation Fiscal Issues and Revenue Sources"—Jun, 1; *see also Optimizing the Use of Materials and Energy in Transportation Construction (Transportation Research Board Special Report 166)*

Transportation, U.S. Department of: *see* Transportation Research Board, National Research Council

Trends in the Usage of Magnesium, Panel on Trends in Usage of Magnesium, Committee on Technical Aspects of Critical and Strategic Materials, National Research Council National Materials Advisory Board; report requested by U.S. Bureau of Mines and General Services Administration considers magnesium's potential as a substitute for materials (aluminum and steel) that depend currently on imported ores. (Panel was drawn extensively from the magnesium industry.) If U.S. wants to spur use of domestically available minerals, report finds, "promising avenues for stimulating the production and use of magnesium" include development of methods to reduce energy requirements of production and to recover byproduct chlorine—Oct, 1, 5

Tukey, John W., chaired National Research Council Committee on Impacts of Stratospheric Change reporting on *Halocarbons: Environmental Effects of Chlorofluoromethane Release*—Nov, 1

Underexploited Tropical Plants with Promising Economic Value, Ad Hoc Panel of Advisory Committee on Technology Innovation, Board on Science and Technology for International Development, National Research Council Commission on International Relations; report describes 36 tropical plants with unrealized potential for contributing to the economic development of tropical countries. Urgent research needs in tropical botany and agriculture lead panel to endorse establishment of an international network of genetic resource stations as proposed at United Nations Conference on the Human Environment in 1973—Mid-Jun, 1, 10-11

United Nations Educational, Scientific and Cultural Organization (UNESCO), Joint Committee on, National Academy of Sciences and American Academy of Arts and Sciences: established in spring of 1976 to try to develop means of retrieving UNESCO by minimizing pressures for politicization and to study ways of making UNESCO more efficient in its work. Committee members include R. Revelle, S. Davis, A. Solomon, D. Apter, R. Bowie, H. Brooks, T. Malone, and J. R. Porter—Jul, 3

United Nations Environment Programme: *see Early Action on the Global Environmental Monitoring System*

United States Government: *see names of individual agencies*

U.S.-Japan Cooperative Medical Science Program: *see Immune Response of the Malnourished Child: A Position Paper*

Untersteiner, Norbert, chairman of Committee on the Nansen Drift Station Project, National Research Council Polar Research Board—Apr, 3

Van Duuren, Benjamin L., co-chaired (with J. R. Goldsmith) Panel on Vapor-Phase Organic Pollutants, of the National Research Council Committee on Medical and Biologic Effects of Environmental Pollutants—Aug, 2

Vapor-Phase Organic Pollutants: Volatile Hydrocarbons and Oxidation Products, Panel on Vapor-Phase Organic Pollutants, National Research Council Committee on Medical and Biologic Effects of Environmental Pollutants; report prepared at request of U.S. Environmental Protection Agency is one of a series of subcommittee reports evaluating the state of knowledge of pollutants and suspected pollutants, and is intended as a companion report to *Particulate Polycyclic Organic Matter*. Panel's purpose was to review selected gaseous organic air pollutants (such as benzene-related aromatic compounds in gasoline) likely to affect health or well-being and to compile necessary information for possible standard-setting and regulatory action. Report stresses need for research concerning atmospheric oxidation reactions and effects of individual pollutants, and considers public-policy implications of epidemiologic information or lack of it—Aug, 2-3

Wegman, Myron E., chairman of Committee on Implications of Declining Pediatric Hospitalization Rates, National Research Council Board on Maternal, Child, and Family Health Research—Apr, 4

White, Gilbert F., chairman of International Environmental Programs Committee, National Research Council Environmental Studies Board, reporting on *Early Action on the Global Environmental Monitoring System*—Aug, 4

Whither Science in the Next Decade?, National Academy of Sciences' Bicentennial Symposium planned in conjunction with annual meeting in April to consider direction of science in the next 10 years—Apr, 3

Wittwer, Sylvan, chairman of National Research Council Board on Agriculture and Renewable Resources, which prepared report *World Food and Nutrition Study: Enhancement of Food Production for the United States*—Mid-Mar, 6

Wixson, Bobby G., chairs panel on the Trace Element Geochemistry of Coal Resource Development Related to Health, Subcommittee on the Geochemical Environment in Relation to Health and Disease, of the National Research Council's U.S. National Committee for Geochemistry—Jul, 7

World Food and Nutrition Study: Enhancement of Food Production for the United States, National Research Council Board on Agriculture and Renewable Resources; report prepared for National Research Council Study on World Food and Nutrition recommends research priorities to improve U.S. agricultural production and changes in the administration of agricultural programs. Report suggests a National Agricultural Research Policy Council to address "urgent need for establishing national goals and policies." World population increases also necessitate a consistent U.S. strategy for increasing world food production and providing technical assistance to developing nations. Report stresses needs for assessing land, water, and manpower resources and for research in nutrition, energy, and weather—Mid-Mar, 1, 6-7

World Food and Nutrition Study: Interim Report and *Recommended Actions on Nutrition Research and Development. World Food and Nutrition Study: Interim Report*, Steering Committee for the National Research Council Study on World Food and Nutrition; *Recommended Actions on Nutrition Research and Development*, National Research Council Food and Nutrition Board report to the Steering Committee. Interim report draws upon its two companion reports to recommend areas of research necessary to ease world food and nutrition problems in the face of increasing world population. Report urges international action, including increased U.S. efforts to establish international networks for collaborative research and development. Steering Committee's final report is to examine "all discernible lines of research and development on world food supply and nutrition that could open the way to major improvements," although it found little to be gained from identifying research needs unless U.S. Government food research budgets are increased sharply, particularly in the Department of Agriculture—Mid-Mar, 1, 6, 7, 16

W. R. Hewlett Foundation: *see* Medical Injury Compensation Mechanisms, Study of

Yordy, Karl D., named executive officer of the Institute of Medicine of the National Academy of Sciences (succeeded R. J. Bulger)—Oct, 1